



ECLECTIC MAGAZINE

OF

FOREIGN LITERATURE, SCIENCE, AND ART.

OCTOBER, 1858.

From the Edinburgh Review.

THE PROGRESS AND SPIRIT OF PHYSICAL SCIENCE.*

ALMOST every age of human history has either given to itself, or received from posterity, some epithet, marking, whether truly or fancifully, its distinctive place in the records of the world. It would be easy to find and to apply many such epi-

thets to the remarkable period in which our own lot is cast; abounding, as it does, in characteristics which distinguish it from any that have ever gone before. One, which we can not doubt that our own posterity will adopt, inasmuch as it affirms a fact equally obvious and certain, is, that we are living in *an age of transition*; a period when changes, deeply and permanently affecting the whole condition of mankind, are occurring more rapidly, as well as extensively, than at any prior time in human history. The fact is one which lies on the very surface of all that we see in the world around us. No man of common understanding, even in the narrowest circle of observation, but must mark the continual shifting of things before him; reversing, in many cases, the maxims and usages which are the inheritance of centuries, and altering, in a thousand ways, the present conditions of material

* *Essays on the Spirit of the Inductive Philosophy, the Unity of Worlds, and the Philosophy of Creation.* By the Rev. BADEN POWELL, M.A., F.R.S., etc., Savilian Professor of Geometry in the University of Oxford. London: 1855.

The Correlation of Physical Forces. By W. R. GROVE, Q.C., M.A., F.R.S., etc. Third Edition. London: 1855.

On the Conservation of Force. By Professor FARADAY, D.C.L., F.R.S., etc., etc.

Essays from the Edinburgh and Quarterly Reviews, with Addresses and other Pieces. By Sir JOHN F. W. HERSCHEL, Bart., K.H. London: 1857.

The Soul in Nature. By the late Professor OERSTED. Translated by the Misses HORNER. London: 1852.

Nomos. An Attempt to demonstrate a Central Physical Law in Nature. London: 1856.

VOL. XLV.—NO. II.

and social life. The philosopher who looks from a higher level, and upon a more distant horizon, discerns in these changes a wider and more lasting influence. He sees that they involve the relations of races and communities of men over the whole face of the globe; and that they are destined, sooner or later, to obliterate many of those diversities and lines of demarkation, which, however originally produced, seemed almost to disserve the species, in the contrasts of human existence they afford. He takes further note of what is the great agent in this and other changes, that wonderful progress in physical philosophy, which has placed new powers in the hands of man—powers transcending in their strangeness and grandeur the wildest fables and dreams of antiquity; and the effects of which are already felt in every part of the habitable earth. He sees the march of discovery continually going on; new paths opened; new instruments and methods of research brought into action; and new laws evolved, giving connection and combination to the facts and phenomena which unceasingly accumulate around us.

Closely, or even necessarily, connected with the changes last denoted, is the topic to which, as suggested by the works before us, we would especially invite the attention of our readers. We allude to the concurrent changes taking place in the spirit and scope of physical philosophy at large; scarcely less remarkable in their nature and influence than the discoveries in which they originate, and by which they are sanctioned. Modern science, in its dealings with the great physical powers or elementary forces which pervade and govern the material world, has been led, or even forced, into a bolder form and method of inquiry. Inductions of a higher class have been reached, and generalizations attained, going far beyond those subordinate laws in which science was formerly satisfied to rest. Experiment and observation, as the agents in acquiring knowledge, must always to a certain extent be alike in their objects and methods of pursuit. But the precision and refinements of modern experimental research—partly due to greater perfection of instruments, partly to the higher principles of inquiry pursued—strikingly distinguish it from that of any anterior time. With every allowance for illus-

trious exceptions, it is impossible to make the comparison, and not to see that the physical researches of our own day have a larger scope and more connected aim—that experiment is no longer tentative merely, but suggested by views which stretch beyond the immediate result, and hold in constant prospect those general laws which work in the universe at large. Nor is the power so gained ever now permitted to be dormant or inert. If thought suggests experiment, experiment ministers fresh materials to thought; and the philosopher working bodily with the new forces at his command, and under the guidance of hypotheses, which extend to the very confines of human intelligence, obtains results which almost startle the imagination by the inroads they seem to make on the mysteries beyond. When flying along the railroad at forty or fifty miles an hour, with a slender wire beside us, conveying with speed scarcely measurable, the news of nations, the demands of commerce, or the fates of war, we have an example (though few care to estimate it fully) of those mighty attainments which bind, to do our bidding, elements before unknown or uncontrolled by man; and which give certainty of other and similar attainments in time yet to come.

Admitting that hypothesis, and this often of very adventurous kind—the “*animi jactus liber*”—blends itself largely with the recent progress of physical science, we would in no way impugn this powerful instrument and aid of research; the use of which, under due limitation, is justified equally by reason and experience. In all inquiries of this nature, except those of strictly mathematical kind, certainty and conjecture necessarily and closely commingle. The speculation or bare analogy of one day becomes the scientific induction of the next; and even where hypothesis is not thus happily fated, it still has often high value as a partial interpreter and provisional guide to the truths sought for. All sciences, and very especially those of optics, of chemistry, of electricity, furnish notable instance to this effect; and have rescued hypothesis, in the philosophical sense of the term, from the vague reproach which it was once the fashion to cast upon it. Such vindication, however, affords no sanction to that spirit, which pushes mere speculation far in advance of experiment and observation, and adventures rashly into fields not prepared

for human culture, if indeed ever accessible to it. Eccentric theories of this kind, the produce of imperfect knowledge or illogical understanding, will ever be found in the path of science; perplexing, it may be, to those who loosely follow it; but disappearing one after another, as truth pursues its steady course amidst them. The mysteries of organic life, approached with caution by the true philosopher, are an especial seduction to these framers of new systems—systems which it becomes easy to coin, under shelter of a vague phraseology, and aided by the very obscurity of the subject.

While speaking thus generally on the spirit and methods of modern science, we may notice the fact, that there is scarcely one of the legitimate hypotheses of our own time, or even any great law founded on the soundest inductions from experiment, which is not prefigured in some way, more or less distinctly, in the philosophy of former ages. We might, had we space for it, give many curious instances of these anticipations; and assign reasons why they should especially be found in the more recondite parts of philosophy, such as the origin of matter, the qualities and combinations of atoms, the theories of space, ether, forces, etc.—transcendental questions which press themselves upon the thought of the metaphysician, as well as of the naturalist and mathematician, in contemplating the phenomena of the universe. Through these avenues of thought and speculation, little aided by experiment or systematic observation, the subtlety of a few rare spirits in each early age came upon the traces of physical truths, which modern science has approached by more certain roads, and made the lawful prize of inductive research. What were then hasty and transient glances into these profound parts of philosophy, have now become a steady insight into the great physical laws under which are embodied all the phenomena of the natural world.

We have placed at the head of this article the titles of several recent works, well fitted, by their various merits and by the eminence of their authors, to illustrate the view we have briefly given of the present aspects of physical philosophy, as well as to indicate those future prospects of science, which may fairly be inferred from the spirit in which it is now pursued—the

attainments still possible to human reason or human power. These are the points to which we now seek especially to direct attention. We might easily double or treble the number of the volumes thus referred to, were we to include even a small proportion of the systematic or elementary works; the lectures, memoirs, or addresses to scientific bodies; or the articles in reviews and other periodicals, which, under the influence of this new vigor of inquiry, and the practical popularity of many of its topics, have opened their pages to meet the demand for more familiar information than scientific treatises can afford. These topics, in fact, include not only the sciences treating of the simpler inorganic conditions of matter, and the elementary forces—heat, light, electricity, gravitation, chemical affinity, which act upon the material world—but also animal and vegetable physiology in their whole extent, and those wonderful laws of organic life, connecting matter with vitality, instincts and intellect, under the numberless forms and species which are placed before us for our contemplation. In surveying this vast field of natural knowledge, for the purposes just indicated, we must of necessity limit ourselves to a broad outline; thereby forfeiting in some part the interest which belongs to the familiar details and illustrations of each particular science; but gaining in compensation a more connected and comprehensive view of the relation between the different sciences; and of those great discoveries in all, which are ever tending to bring them into closer approximation and subjection to common laws. We need scarcely dwell on the importance of such general views, and their influence on the spirit and progress of physical philosophy. We shall have occasion immediately to illustrate it, in speaking of the efforts made by some of the most eminent men of science of our day, to give concentration and unity to parts of physical knowledge, and to classes of phenomena, hitherto regarded as having no co-relation or common principle of action.

We do not undertake to analyze in detail, or even to notice, all the works before us. To some of them, however, and especially to those placed first on the list, we must separately refer, inasmuch as they furnish the most able exposition of those doctrines and methods of modern science which it is our object to examine.

And under this view we must first notice the volume of the Rev. Baden Powell, Savilian Professor of Geometry at Oxford; not merely from the high scientific reputation of the author, but as embodying, and vindicating in great part, all the boldest conclusions derived from recent research. Approaching our subject through this work as the threshold, we enter at once on the highest debatable ground, amidst questions which have more or less perplexed the reason of man in all ages; formerly, as intellectual problems or paradoxes only—now, as the natural or necessary result of those experimental inquiries which have been carried through every part of the material creation.

Professor Powell's work includes three separate essays: one on the "Spirit of Inductive Philosophy," another on the "Unity of Worlds," the last on the "Philosophy of Creation." The second of these essays, though containing much other valuable matter, is mainly an answer to that remarkable volume entitled the *Philosophy of Worlds*, which, despite its anonymous form and paradoxical argument, has gained credit and weight in the public mind from the eminent name attached to its probable authorship. The curious question raised, or rather revived, by this work—one destined from its very nature to be answered by *presumption* only—has already elicited so much active controversy, in which we have ourselves taken part, that we refrain from touching upon it, here; though we might fairly do so as an example of the altered method in which such controversies are now carried on, and of the new class of proofs brought forward for their solution. But of the first and third of these essays of Professor Powell we must speak more in detail, in their bearing upon the subject before us.

They are written, we may first remark, with great vigor and ability of thought; with much of happy illustration, derived from the very large scientific resources of the author; and in a style singularly fitted to these subjects by its clearness and precision. Of the boldness of the work, in advocating doctrines and hypotheses not yet fully matured by research, we have just spoken. It would not be a harsh criticism to say that Professor Powell shows a marked fondness for what is new and arduous in philosophy; and takes pleasure in stigmatizing, as hindrances to truth in physical science, all such opinions as are

fostered by ancient and popular belief, including those which assume Scriptural authority for their foundation. In his just zeal against dogmatical authority, he sometimes falls into the opposite rashness of lending his authority and favor to hasty and partial experimental deductions; or to doctrines still in their infancy, and checked or controverted by opposite opinions of equal weight. To this temperament of mind, as we venture to describe it, we may attribute his somewhat eager adoption of the doctrines of "Transmutation of Species;" of "the Unity of Composition" as a principle in physiology; of the principle of "Continuity and immutability of physical laws in geology;" and of the Correlation or community of vital and physical forces in all the automatic acts of life, and even in many mental acts which may be thus regarded. His reasonings on the doctrine of Final Causes or *Teleology*, as it is now the fashion to call it, have the same character and bearing. All these are broad questions, and fairly open to argument and evidence. But we have the constant feeling in the volume before us, that the leaning is too much to one and the same side of these questions: we might fairly call it the *paradoxical side*; while admitting, at the same time, that paradoxes are often raised into the class of recognized truths; and, in a certain sense of the term, may even be deemed instruments of science, though instruments ever to be used with caution and forbearance. As a more special instance of what we have just mentioned, we might quote the sort of sanction our author gives to the crude experiments of Messrs. Crosse and Wickes on the seeming creation of animalcule life under certain conditions of the galvanic current; a conclusion loosely drawn in its origin, without any known analogy, and not justified by any later research. On this point, as on many others in his third Essay on the "Philosophy of Creation," we find a close approximation to the doctrines of the *Vestiges of Creation*, another well-known work of our own time, which by its ability has contributed greatly to diffuse a taste for these transcendental inquiries in science—a dangerous effect, were it not corrected by the contemporaneous activity of those philosophers who make experiment and strict induction the sole measure and guides of their progress.

To the question stated above we may especially refer, as examples of the class of profound problems on which modern science exercises itself; seeking their solution by experiments and observations far more refined and exact than have ever before been applied to these inquiries. But there is another question largely discussed in Mr. Baden Powell's work, to which we would advert, as expounding better than any other the present spirit and scope of physical philosophy. This is the doctrine described by our author in his first essay, under the titles of "Unity of Sciences," and "Uniformity of Nature"—terms meant to express, but expressing too strongly, those admirable generalizations which have connected under common laws phenomena seemingly the most remote and unlike, and are continually tending still further so to combine and concentrate them. Taking the subject in this general sense, we can not hesitate to regard it as one of the very highest which can be submitted to the human understanding. The unfulfilled objects of science, as well as its ultimate end and aim, evidently lie in this direction; and none can be indifferent to the wonderful results which every year is disclosing to researches pursued on this principle. Among those who have labored most successfully for this especial object are the eminent men whose discoveries in particular branches of science have given them merited fame in the world. If out of many contemporaries we were to select a few who have done most to elevate physical science by generalization of its phenomena and laws, the names of Arago, Faraday, Herschel, and Humboldt occur at once as first and most illustrious in this career. These philosophers have looked upon the world of nature in its largest aspects, and made their several discoveries subservient to this great object; thereby widening the circle of facts and phenomena, and at the same time drawing them more closely towards that center in which we find so many sciences to converge.

Nevertheless we must not allow these terms of "Unity of Science," "Unity of Principle," and "Unity of Law," to usurp too much on the understanding. Professor Powell seems to us to give undue force to such phrases; which, strictly examined, have no counterpart or reality in our actual knowledge. It is true that

there is various high authority for their use, as for that of language analogous in effect. Humboldt, in several passages of his *Cosmos*, and, at an earlier period, D'Alembert and Laplace, have sanctioned the general conception, though not defining it sufficiently for any application beyond that attempt at generalization just noticed; and which would have existed, even if no such mysterious word as "Unity" had been used to signify the ultimate end in view. We readily admit it as probable or certain, that numerous facts, hitherto insulated or anomalous, and even whole classes of phenomena unexplained by science, will hereafter be submitted to common and known laws. And we further believe that many laws themselves, now of partial application, will hereafter merge in others of higher scope and generality. We shall speedily have to notice certain cases where this amalgamation has so far advanced as to furnish an entirely new basis for research, scarcely seen or anticipated before. But admitting what we have full right and reason to presume, that this concentration may be carried yet much further, still the attainment or even the conception of unity, in any strict sense of the word, lies indefinitely beyond, shrouded by an obscurity which words may seek to penetrate, but which human intellect can reach only in that one sublime sense of the unity of the Divine Creating Power. We may reduce to a small number the many forms of matter which are elementary to our present knowledge; we may show the identity of certain forces hitherto deemed elementary by their mutual convertibility; we may accept the phrase of Laplace, "*Les phénomènes de la Nature ne sont que les résultats mathématiques d'un petit nombre de lois immuables*;" and yet we shall never prove that there is but one kind of matter, or one nature of force, or that a single law governs all the phenomena around us. To put forward, therefore, the phrase and conception of the "Unity of Science," as the final term of our labors, is to inflict a metaphysical issue upon them for which there is no warranty either in reason or practical use. Bishop Berkeley has somewhere spoken of ultimate ratios in mathematics as the "ghosts of departed quantities." With like reason we might call the unity of some of our modern philosophers the "ghost of departed pluralities;" having this quality of

ghosthood, moreover that there is nothing truly tangible or substantial about it.

We have dwelt thus much on these preliminary topics because, while they indicate what may be considered the exaggerations and excesses of theory, they show at the same time that spirit and propensity of modern science of which we have before spoken; and which, duly regulated, has been the source of all its high attainments. We now proceed to such details as may best illustrate this spirit in its application to different branches of science; selecting amidst the multitude of examples those especially which involve either some new physical principle or some new method of physical inquiry. It has been said by one who could well estimate the value of the latter, "*La connoissance de la méthode, qui a guidé l'homme de génie, n'est pas moins utile au progrès de la science que ses découvertes.*" A new method is often indeed in itself the greatest discovery, and betokening the highest genius in him to whom it is due.

In dealing with this wide subject, the first and most material division is that between the forces acting *on* or *in* matter; and the various forms of matter, inorganic or organic, so acted upon. With full admission of the difficulty of defining the abstract nature of matter and force, and their mutual relations in the universe, this distinction is still the only one which our intelligence can apprehend, or practically apply to the objective phenomena ever present and active around us.

In regard to matter and force it may undoubtedly be affirmed, that all questions as to their nature become more difficult and abstruse in proportion as we generalize and reduce them to their simplest terms. With respect to force, more especially, the most eminent philosophers of our time, while declining any metaphysical definition, have been constrained to adopt new methods of regarding and describing it, in those various actions upon or through matter which testify to its presence and energy. Centers of force, (an expression due to Boscovich in its scientific use,) lines of force, polar force, etc., are terms found necessary to express the several modes of force in action, irrespectively of all questions as to its abstract nature, or especial relations to matter. Under the gradual adoption of this new language, there has

been a corresponding abandonment of phrases, more hypothetical in themselves, and far less fitted to aid the progress of scientific inquiry. As such we may denote that expression, current even in some of our best systematic works, of the "imponderable substances or forms of matter;" which, in including heat, light, and electricity, makes assumptions wholly unproved; while in excluding gravitation, chemical, mechanical, and vital forces from the same category, it affirms a distinction which we do not absolutely know to exist in any of these cases, and which certainly does not exist in some of them. For the notion of an *imponderable element* (if notion it can be called) that of a *mode of motion of matter* might probably in each case be more truly as well as advantageously substituted. Science, it may fairly be said, is constantly tending to a better and closer form of logic in these matters; and simple induction from facts, unfettered by names and prior notions, is here as elsewhere the best guide to all ulterior discovery.

The great problem respecting force, in the most general conception of it as a motive power on matter, is involved in the question, Whether it can ever be really lost or extinguished? whether the seeming cessation and limits to its action are not merely conversions or translations of power, testified in other forms and effects of material change? Most persons, seemingly justified by experience, would answer at once that any force has ceased to exist, when the motions or other effects it induces on matter are no longer present. The question, however, is one which rises far above the mere evidence of the senses. Vaguely suggested at different periods, it has been adopted in a definite shape by the philosophers of our own time; forced upon them, we may say, by the course and character of recent discovery. It is the question which forms the main topic of Mr. Faraday's lecture, just referred to, on the "Conservation of Force;" and we willingly quote a few lines, both from the intrinsic weight of all that comes from this source, and as expressing what we consider to be the growing conviction of all who have grappled with this great problem of modern science:

"To admit that force may be destructible or can altogether disappear, would be to admit that matter could be uncreated, for we know matter only by its forces." "Agreeing

with those who admit the conservation of force to be a principle in physics as large and sure as that of the indestructibility of matter, or the invariability of gravity, I think that no particular idea of force has a right to unlimited or unqualified acceptance, that does not include *assent* to it; and also, to *definite amount* and *definite disposition of the force*, either in one effect or another, for these are necessary consequences. Therefore I urge, that the conservation of force ought to be admitted as a physical principle in all our hypotheses, whether partial or general, regarding the actions of matter."

This question was forced upon the attention of men of science by the very nature of their recent researches, and the remarkable doctrine based upon them, which is now developing itself under the title of the "Correlation of Physical Forces;" a description modest as well as apposite of a theory, which, if matured, as we think it likely to be, into full truth, will give new foundation and guidance to the whole course of physical inquiry. In the work of Mr. Grove, bearing this title, and prefixed to our article, we have the first and most able exposition of this doctrine. Partial suggestions of it, both in England and Germany, had already been derived from the results of experiment; but we owe to Mr. Grove its distinct enunciation as a physical principle, and the illustration of this principle by instances drawn from his own researches and those of others, which give it all the characters of a new physical law. Eminent in his own profession, he has made to himself a high and merited reputation in science, by his acute application of experiment to some of its most profound problems, and by the bold but precise logic with which he draws his inductions. His work, of which the third edition is before us, is remarkable for its clearness and simplicity of style—qualities valuable in all scientific writings, and essential on subjects like those here treated of.

By the term correlation, as applied to physical forces, Mr. Grove means to convey the general idea of *reciprocal production*—that is, that any force capable of producing another, may reciprocally be produced by it. But the principle here involved, as well as the wide scope of the doctrine conveyed by these terms, will be better understood by taking correlation to express generally those relations of forces which render them mutually and constantly convertible—one form or manifestation of force generating another, so

as to bring together into the same series of effects, physical actions and changes seemingly the most remote and dissimilar. Thus, to take a familiar but striking instance—the same single electrical current from a voltaic battery is capable in its circuit of evolving heat and light, of creating magnets, of producing mechanical force, of violently affecting the nervous and muscular organization, and of inducing, by decomposition or combination, the most powerful chemical changes, simply according to the nature of the different material objects which the experimentalist interposes in the circuit, so as to subject them to this current of power. Here then (gravitation excepted) we find all the great natural forces, of which we have present knowledge, evolved from a single source; and that source, be it remarked, a chemical change of affinities, giving origin to the electrical current, and thereby affording fresh proof of the reciprocity of actions alluded to above. One form of force disappears as another is evolved.

We might give, had we space for them, many other curious instances of this reciprocity of relation, as manifested by the several forces of heat, electricity, magnetism, mechanical power, and chemical affinity. One we may select, as an example of beautiful contrivance as well as striking results. By a certain combination of apparatus, in which light, acting through the daguerreotype, was the initiating force, Mr. Grove obtained, first the *chemical action* upon the plate; thence a current of *electricity* circulating through wires; next *magnetism* by a coil of these wires; then the production of *heat*, testified by the delicate helix of Breguet; and finally, of *motion*, shown by the needles of the galvanometer. Instances of this kind, indeed, are rapidly multiplying, since the correlation and convertibility of forces has been recognized as a principle and applied to research. They are derived not solely from recent experiment, but even more frequently and fruitfully from phenomena already familiar to us as facts, but waiting for their illustration the happy induction now at length attained.

The beauty of this principle, however, is not limited to the expression of the reciprocity or mutual convertibility of the physical forces with which we are dealing. There is much reason to believe in a further correlation as regards their equiva-

lents of power, or measurable quantitative effects. Though this generalization is still far from complete, numerous cases occur where it is attested by the results of very exact experiment. The discoveries of Faraday have furnished some of the most striking examples of constant quantitative relation between electrical power and chemical actions and changes. The researches of Dulong, Petit, and Neumann show very remarkable relations between chemical affinity and heat, in proving that the specific heats of certain substances, compound as well as simple, when multiplied by their chemical equivalents, give a constant quantity as the product. And again, the experiments recently made by Mr. Joule and Professor W. Thomson, on the mutual convertibility of heat and dynamical force, go far to demonstrate the remarkable fact that, in whatever way mechanical force is employed to produce heat, the same amount of heat is produced by the same amount of force. We doubt not that the progress of science will so multiply the number of these instances of quantitative relation, as ultimately to submit them to some general law, as well as to that practical application which is the most certain test of truth.

It will be noticed that we have not hitherto spoken of gravitation as a physical force; though it is the one with which we are most familiar in every incident of life, and to which we look as the most universal agent upon matter, as well in the globe we inhabit, as in the innumerable words surrounding us in space. We place it apart from other physical forces, because, while thus familiar to our senses in its effects, it is to our deeper meditation the most mysterious as well as vast and sublime of the powers which act in the universe. Human genius has discovered and mathematically defined its laws. By knowledge of these laws, human science has been carried, and is ever penetrating further, beyond our own planetary system; while within this system, they have enabled us to predict events in time and space, and to define physical conditions of the planets and their satellites, seemingly inaccessible by man. With all this knowledge and perpetual application of the power, of its nature and essence we are utterly ignorant. Science has dealt with its effects only, without really approaching a step nearer to the

cause, than when Newton declared that he must leave to the consideration of his readers the question whether the agent producing gravity was material or not. Hypotheses have grown up—such as that of *gravific atoms* permeating all space, of Le Sage—or the *residual force* theory of Mosotti, connecting gravity with cohesive attractions—but none which satisfy fully the exigencies of the case. The research is even made more difficult by the simplicity and invariability of the power in question. It controls or modifies the other forces acting on matter, but has no such relations to them as they have to one another—no reciprocal production or mutual convertibility; nor the *duality of action* belonging peculiarly to the electrical and magnetic forces; nor lines of propagation and polarization, such as we recognize in light and heat; nor those molecular changes manifested in acts of chemical affinity. Whether any—or if any, through what avenues—closer approach may hereafter be made to the solution of this great problem of gravity, we can not here inquire. But in speaking of the forces which act upon matter, it was impossible to omit this the most universal of all—innate and incorporate, we might almost say, in matter itself.

Nor can we rightly avoid in this place some allusion to the equally abstruse subject (though rendered so by very different causes) of the mutual relations of the physical and vital forces—a topic handled with great ability by Dr. Carpenter, in a paper in the *Philosophical Transactions* a few years ago, and more recently in the systematic works of this physiologist. Without plunging into the depths of this question, we may say that the tendency of all recent research has been to impugn the doctrine of vitality, both in animal or vegetable life, as a distinct force or power; and to merge its alleged functions, whether of organization, maintenance, or reproduction, in those same physical forces which act on the inorganic matter of the world around us. That this is true to a certain extent can not indeed be doubted. That heat and light, and more especially the former, are intimately concerned in all the phenomena of vital organization, is a fact familiar to us from a thousand examples. The researches of Liebig and others have shown how very closely chemical processes are engaged—even under the strict law of definite proportions—in all the great pro-

cesses of the highest animal life, assimilation, secretion, respiration, animal heat, etc.; while the discoveries of Matteucci and Du Bois Raymond have demonstrated the curious and exquisitely subtle relations which exist between electricity and the nervous and muscular functions; not indeed proving the absolute identity of electricity with the nervous element of force, but countenancing this view beyond all prior expectation.

In thus discussing the relation of the physical and vital forces as applied especially to man, we continually approach that line, hard indeed to discriminate or define, which separates the mere vital or automatic acts from the proper functions of mind, consciousness, thought, feeling, and volition. On this debatable land we encounter at once the old questions, so long the subject of philosophical speculation, and destined, as far as we can see, ever so to remain. Human science on this point is as feeble as it was two thousand years ago, and beset by exactly the same difficulties. We have just been speaking of forces which are correlated and measurable in their effects. We come here to powers and functions *wholly incommensurable* either with material qualities or physical forces; yet so linked with both under the present conditions of existence, that not even personal consciousness, the best and surest of all teachers, can mark any certain boundary line. Those who have sought to decipher or define these proximate relations of matter and mind have but substituted barren words for the realities of knowledge. Mr. Baden Powell himself, while stretching the domain of physical causes to the total phenomena of animal life, yet finds a limit here; and somewhat abruptly closes his argument by observing that the assertion of a moral and spiritual nature in man refers essentially to "a *different order of things*, apart from and transcending any material ideas whatsoever." To some such conclusion, however expressed, all must come who honestly and rationally approach this question.

We have dwelt thus long on the subject of the physical forces—the "imponderables" of former systems—as illustrating at once a great doctrine of modern science, and the general spirit of philosophy at the present time. We are far, however, from having exhausted the subject. Questions crowd round and con-

verge upon it from every side; some of them so subtle in kind that we might well call them metaphysical, had we not in some sort repudiated this term. Such are, to state briefly a few of them, the question whether forces can exist, except in absolute connection with matter? whether they may, intelligibly and consistently with phenomena, be regarded as molecular actions, or modes of motion in matter? whether (to revert to a question urged before) they can ever by possibility be annulled or even rendered latent? whether, in admitting this constant combination of forces, we do not virtually admit a *constant amount* of force, variously manifested, to be always present in the universe? and whether, in such cases, we can ever rightly speak of an *initial force*, otherwise in the sense of those acts of creation which are the beginning of all things? All these and other like questions belong to the philosophy of our day; some of them shadowed out in the hypotheses of antiquity; now approached through the safer avenues of experiment and sound induction. How far these may carry us to the future solution of the problems suggested, we can not here stop to inquire.

In passing from the province of forces acting on matter, to that of matter thus acted on, we have yet to traverse another debatable ground, on which science is seeking to find some firm footing, as well as in explanation of known phenomena as for purposes of further research. We allude here to the question regarding the *physical condition of space itself*—of those inter-planetary and inter-stellar distances, some of them hardly measurable by numbers, and such as no efforts of mind can compass or conceive. Are we to regard this vastness of space as void of matter—a mere vacuum, through which the numberless worlds we see as stars or planets, are dispersed? Or may we better contemplate it, as pervaded throughout by some material medium, though so rare and attenuated, that no form of matter of which our senses are cognizant, can rightly interpret it to our reason? The question can no longer be argued in that mystical language of "nature abhorring a vacuum," which satisfied the demands of an earlier philosophy; nor can we evade it by the adoption of terms such as *ether*, *ethereal medium*, etc., which, though sanctioned by some great names,

go little further than to shelter a vague and incomplete solution. Modern science seeks urgently for proof that matter, in some condition, does exist throughout space; and in such continuity, however rare it be, that forces may be transmitted *by or through* the medium thus afforded. Two great powers, gravitation and light, undoubtedly reach us from the most remote regions of space. There is presumption, though not certainty, that heat is associated with light in its origin, as a concomitant, if not convertible force. More doubt exists as to the transmission through space of the electric or magnetic powers; but many facts of recent observation tend to authenticate this belief. How then are these forces, or any of them, transmitted to and fro in the universe? If we say that the tides of the ocean are raised, or the perturbations of a planet produced, without any intervening medium between the bodies affected and those affecting them, we quit the domain of physics altogether, and put an abrupt end to inquiry. Newton has expressed himself strongly on this matter, in saying: "To suppose that one body may act upon another at a distance, through a vacuum, without the mediation of any thing else, by and through which their action and force may be conveyed from one to another, is to me so great an absurdity that I believe no man who has in philosophical matters a competent faculty of thinking, can ever fall into it." The conviction which his conception of gravity impressed thus strongly on Newton's mind, is enforced upon us not less cogently by the undulating theory of light. This theory—based on mathematical proof, and capable not merely of explaining phenomena before known, but of *predicting* others evolved by later research—presumes of necessity the existence of an elastic medium, whatever its nature, through which these undulations are transmitted. We say *of necessity*, because it is logically thus to our reason. Not solely on the analogy of air and other elastic media, but as the only conception we can form to the mind of undulation singly considered, the presence of a medium is essential to its existence and effects. And this fully recognized, the inferences become of magnificent kind. The progressive retardation of Encke's comet, and the aspects of the zodiacal light, afford presumption of such material media

existing within our own solar system; but the argument we have just stated, carries us far beyond this limit, to every part of that sidereal and nebular space from which light ever reaches the eye of man.

In coming finally to those several sciences which deal with matter in its more recognized forms, we must once again repeat that our object is simply that of indicating the spirit and scope of modern science, as illustrated by its new objects and methods, and by the high attainments at which it has arrived. Volumes would be needed to give even an approximate idea of the particular discoveries, whether from experiment or observation, which have conducted to these attainments. In the hasty view we are taking, we can but notice such as are most striking in character and results. Nor are we called upon to do this methodically; since, as we have before mentioned, one of the most eminent successes of our time is that of having brought all the branches of physical science into closer connection and subordination to more general laws; and in illustrating these new connections, examples converge and crowd upon us from sources seemingly the most remote.

Humboldt, in his *Cosmos*, has rightly given to astronomy—"the science of the universe without"—the first place in his great picture of physical knowledge. So much has lately been written on this science—the highest glory, it may well be deemed, of the human intellect—that we need only allude to a few of its more recent attainments; not surpassing indeed those discoveries which we owe to the genius of an anterior time, yet so extending the doctrine of universal gravitation in the variety and refinement of its applications, that new grandeur is given to this great law of nature. We may take one or two examples, among many that offer themselves, from our own planetary system; where this power is more within our cognizance, both in its simple effects and in those complex perturbations of orbits, which have taxed, but not overcome the efforts of our most illustrious mathematicians. The first instance—one of those familiar to the world for the moment, but speedily forgotten—is a discovery made by means of these very perturbations. The movements of Uranus, then (1846)

supposed the most remote planet of our system, were found to be disturbed by some external influence not referable to causes *within* its orbit, as could be shown, but due to some material attraction from without. Another planet alone could answer these conditions. Science set itself to work in the persons of two eminent mathematicians, Adams and Leverrier—the position of the disturbing body was determined by them simultaneously, but independently—telescopes followed their guidance, and Neptune was added to the number of our planets. The method of discovery here has higher interest than the fact itself; though now but one of numerous instances in science, where results can be predicted with hardly less certainty than if attained and present to the senses.

A second example we may cite, in proof of the exactness, or even *delicate minuteness*, with which modern astronomy pursues the vast objects of its science. The complex irregularities of the moon's motions have long put to test all the resources of analysis, and are scarcely even yet fully submitted to our knowledge. Chiefly, of course, they depend on the relative position and distances of the sun and earth; and Laplace had shown not only the secular acceleration of mean motion, produced by the increasing eccentricity of the earth's orbit, but also a small irregularity depending on the spheroidal figure of the earth itself. His suggestion that the oblateness of the earth's spheroid might reciprocally be determined by this irregularity of the moon's motion, led Burg to a calculation, the results of which closely tallied with the best measurements and pendulum observations. Very recently new and more delicate causes of lunar disturbance have been indicated, as depending on the action of the planet Venus; first, indirectly, by perturbing the motion of the earth, altering its distance from the sun, and thereby affecting the motion and position of the moon during periods of 120 years; secondly, by a minute disturbance arising from the *direct* action of Venus on the moon itself. In all these cases the theory accords with the phenomena observed, and this accordance well illustrates the perfection of use which the great law of gravitation has now attained.

In passing the bounds of our own system—*narrow*, we may call them in rela-

tion to what lies beyond—we lose in great part the guidance of this law; though retaining such proof of its equal and probably similar operation in the most distant regions of space, as almost to force upon us the conclusion (warranted indeed by other considerations) that motion is universal and constant in all matter—that nothing in the universe around us is at absolute rest. To prove the continuous movement of the solar system in space, with the direction and rate of its motion—to confirm this wonderful fact by the discovery of the proper and absolute motions of other stars—to determine, by parallaxic observations of incredible delicacy, the distances of certain of the fixed stars, and to measure these distances by the *years* which light takes to traverse them—to demonstrate, among the many thousand double or multiple stars now discovered, those orbits and periods of revolution which obey the same law that brought Newton's apple to the ground—to *gauge* by refined processes our own nebula of the Milky-Way—to discover and assign the place of more than 3000 other nebulae, resolving many of them into systems of stars, and by admirable methods obtaining some approximate idea of their distances—these have been among the undertakings of modern sidereal astronomy; admirably fulfilled by the eminent men who have devoted themselves to this science, the two Herschels, Struve, Bessel, Airy, Argelander, Peters, etc. Sublime even in their simplest enunciation, these problems will be seen to involve results as to space and time which border on infinity; and as such illustrate well those arduous efforts and aspirations of modern science which it is our especial object to indicate.

Though not easy in a science like this to set limits to its future scope, yet is it difficult to suppose any ulterior discovery which can do more than aid in filling up this vast outline. If any new law is discovered in our own system, we might perhaps presume it to be one relating to the rotation of the planets on their axes—an important series of acts arbitrary to our present knowledge, but doubtless due to determinate physical causes, and therefore fairly open to physical research. It is *possible*, seeing the distances which some comets reach in their aphelia, that another planet may exist even beyond Neptune: the discovery, if ever made,

would probably be so through the observed perturbations of Neptune itself. In the sidereal system of which we are a part, much yet remains for future completion. Nothing is more wonderful than the phenomena, periodical, or otherwise, of the variable stars, which are now largely catalogued in our books. Ages may be required to gather any certain induction from our observations upon them. But ages are the field in which the astronomer works; and each present fact, duly recorded, ministers to the higher knowledge which is the harvest of the future. The research into the proper motions of the stars, already noticed, is sure to be greatly extended, and may possibly connect itself in the end (as Mädler has already sought to connect it) with the discovery of some center of attraction and movement to the whole sidereal system. If such central body or point in space were ever ascertained, it would still be simply an expression of the law of universal gravitation; but how sublime an expression, and how wonderful as a result of the genius and labors of man!

But the limit does not lie even here. The telescope of the astronomer, enlarged in its powers and more perfect in all its appliances, is continually engaged amongst those other sidereal or nebular systems, the remoteness of which goes far to express all that man can ever understand of the infinite in space. In a former article, already referred to, we have spoken more at large on this subject. Whoever has inspected those admirable *portraits* of nebulae, as seen through Lord Rosse's great reflector, will comprehend in part the magnitude of this research, and of the problems it puts before us. The aspects and multiplicity of the spiral nebulae, though hardly sanctioning the notion of any new law of matter, yet will warrant the belief in some common but unknown cause conducing to this singular effect. A matter of still higher interest is suggested to us in the question, Whether there exist in these nebulous lights, or elsewhere in space, matter not yet condensed or shapen into forms—the material, it may be, of future worlds, and in different stages of progressive concentration, but still not aggregated as such? The resolution into clusters of stars, by high telescopic power, of many nebulae before thought irresolvable, alters the degree of presumption, but does not settle the ques-

tion. The comparison of different nebulae, as they now exist, and of their several relations to centers or points of greatest condensation, would seem the sole probable avenue to further knowledge; since any changes in the figure, condensation, luminousness, or other aspects of these nebular systems must, upon every analogy of the more proximate parts of the heavens, occupy such immense periods of time as to place them beyond all present reach; and we know too little of the duration of our own species on the earth to venture on any assumption thus remote in its fulfillment.

These questions as to nebulous matter in space are deeply interesting, *retrospectively*, as well as *prospectively*, in time. Few subjects have so keenly exercised speculation of late as the hypothesis, first sanctioned by Laplace, that our own solar system, with its central sun, planets, moons, and comets, has its origin in the concentration of the matter of a nebulous sphere in successive zones; each several planet being formed by the condensation of vapor at these successive limits in the plane of a common equator; and the satellites being similarly formed from the atmospheres of the planets. It does not annul this theory to admit that there are great difficulties in conceiving the cause of such aggregation of matter at certain points, and of the permanent movements impressed on the bodies thus formed. These difficulties, whatever they be, have not prevented its eager appropriation by philosophers who hold the doctrine of progressive development according to certain determinate laws, in the creation both of the inorganic and organic world. They find a basis for the evolution or transmutations they suppose, in this hypothesis of the nebular origin of suns and planets; and their argument would be plausible were the hypothesis itself capable of being verified. How far presumptive evidence may reach in future towards such verification we do not venture to say; but the sources of fresh knowledge are ever opening in this as in other directions of research. The more careful study of cometary phenomena; of the numerous planetoids revolving in eccentric orbits between Mars and Jupiter; of those meteors, some of which have lately been recognized as periodical in occurrence; and of the aërolites, which impinge in mass upon the earth, can hardly fail to settle

some questions as to the occupation of planetary space. How curious, for example, the inference to be drawn from the composition of these falling stones, brought to us undoubtedly from far beyond our own atmosphere, or, as Laplace boldly phrases his belief, "des profondeurs de l'espace céleste!" Of the various ingredients they are found to contain, every one is familiar to us upon the surface of the earth we inhabit. They represent, indeed, fully one third of those forms of matter which are still simple or elementary to our knowledge; though under different aspects and forms of combination. Here then we have a sort of *material ingress* into the regions of inter-planetary space; and presumption as to a common origin, though under different modes of aggregation, not merely of those fragmentary masses which casually reach us, but of the great planets also, which move with ourselves in orderly and ordered course around the sun.

We are tempted to add one or two other instances here, illustrating the manner in which modern science—resting upon the uniformity of laws, whatever the scale of their operation—has brought evidence to bear upon these vast astronomical questions from the most minute manipulations with matter here below. The happy idea occurred to M. Plateau of Ghent of suspending globules of oil within water, rendered exactly of the same specific gravity by addition of alcohol, so that the globules should be wholly exempt from the action of gravity, or other extrinsic force, and free to take any position or motions impressed upon them. By means of a small metallic disk and wires, rotatory movements of various velocity and direction were produced in the spherical globules of oil, thus suspended in water; making them to assume many conditions closely allied to planetary configuration—to become spheroids flattened at the poles—to throw off smaller globules having movements both of revolution and rotation—and even rings like those which Saturn shows to our telescopes. These experiments, repeated by Faraday and others, are as valid in the way of inference as they would be were the scale of operation a thousand times greater. And the same may be said of the second instance we have before us, in those beautiful instruments and inventions of Foucault, Piazzi Smyth, Wheatstone,

etc., illustrating the principle of the stability and composition of rotatory motions, and thereby expounding with admirable simplicity the great phenomena of the precession of the equinoxes, and of the earth's rotation on its axis. The *gyroscope* of Foucault, set in action, and placed on a table, shows even in a few minutes, by the angular deviation from its plane of rotation, the movement the earth has made in this short space of time—a demonstration almost startling from its simplicity and grandeur. The instrument is one of consummate beauty in its other applications; and in the more compound form which Professor Smyth has recently given to it, well indicates the perfection such means have attained in furtherance of scientific research.

We have lingered somewhat long on the subject of astronomy, partly from the striking exemplification it affords of the spirit and aims of modern science; partly from the specialty of its objects, as detached by distance from those relations which so closely connect the sciences treating of matter on our own globe. But though thus distant in space, the vast masses moving in the heavens, and especially the Sun, are variously associated with the matter of the earth, through the elementary forces, of which we have already so largely spoken. Here indeed we come again into contact with those arduous questions, where mathematical aids are scantily supplied, and few certainties yet attained; but where new facts and presumptions unceasingly offer themselves, the foundation and materials of more exact knowledge. Omitting gravitation, of which we have sufficiently spoken as a power apart from the rest, there comes that wonderful element of light; blending itself, as we have seen, with heat, electricity, magnetism, and chemical affinity, in such close correlation of action that we can scarcely dis sever its continuity, or detach these physical forces from connection with that great source whence light itself chiefly emanates. The solar beam, as unfolded and analyzed in the spectrum, is in truth the most marvelous and mysterious object of the physical world; comprising in itself whole volumes of science, and problems that might put to trial the boldest theorist. The poetry of Milton, sublime though it be, fails to reach the reality of these great attributes of light, as evolved from a single beam, by simple re-

fraction in passing through a glass prism. It is an analysis of exquisite order and perfection; in which not only are the several colors separated in the same constant proportions, with the intervention of numerous dark lines equally constant in their character; but rays of heat and of chemical power appear severally also at opposite extremities of the spectrum, partially interblended with those of color, but in greatest intensity beyond the visible colored limits of the spectrum. We are now speaking only of the simplest relations of the solar light to terrestrial matter; and without any immediate reference to the astonishing phenomena included under the undulatory theory of light, which, though attested by mathematicians, and interpreted by numbers, wholly transcend the powers of human conception. We allude, but can not here do more than allude, to those formulae of space and time expressing the amplitude and frequency of the undulations, and their variations for the several colors and rays of the spectrum; and the whole series of phenomena of interference, polarization, diffraction, etc.—discoveries which have given or added lustre to the names of Young, Fresnel, Arago, Brewster, Cauchy, Herschel, Hamilton, and other philosophers scarcely less eminent in this great inquiry.

A word or two we must add here as to one relation—simple in fact, but not familiar to thought—which light establishes between man and the universe around. The total science of astronomy belongs in origin to this element alone. Extinguish those vivid points or bright surfaces of light, which give splendor to the midnight sky—deprive the astronomer of the feeble rays and fainter gleams which stars and nebulae, invisible to the eye, bring before his telescope—and you annihilate at once that science which can predict eclipses centuries beforehand; determine the orbits and return of comets; measure the distances of the fixed stars, and the motion of our own sun and solar system in the universe of space; and penetrate into systems of worlds beyond, where relative degrees of light become the solitary evidence of form and distance. No where are these relations of astronomy to light so admirably illustrated as in Arago's *Analysis of the Life and Labors of the elder Herschel*, recently re-published in the collection of his works.

The evidences connecting electricity and

magnetism, as forces, with the Sun and other bodies of our system, are of course different and inferior to those which establish the relations of light. Yet they are now continually becoming more numerous and significant. Whoever has seen the star of pure and intense light which bursts forth on the approach of the charcoal points completing the circuit of a voltaic battery; or the *flood of light* thence poured by reflection over wide and distant spaces, can not but suspect that the new "fountain" thus opened to the eyes of men (and certainly not destined to remain an idle and valueless gift of science) may be the same in source and qualities as that higher fountain which diffuses light and heat over the whole planetary system. Sir J. Herschel, who ever makes his highest speculations subordinate to cautious induction, has assigned strong reasons for believing the sun to be in a permanently excited electrical state. The various phenomena of the tails of comets he considers as not to be explained, but by supposing a *repulsive force*, acting from the central body, which electricity alone could furnish. "The sun electrically charged would induce opposite states in the two hemispheres of day and night on the earth," is the expression applied to the effect of this solar condition upon our own globe;* and if we suppose, as may fairly be done, variations in the intensity of this electrical state, we acquire a probable cause for many periodical or secular variations which have hitherto embarrassed science. We allude especially here, to changes in the intensity, declination, and inclination of the magnetic force—that extraordinary power which we are now led to refer to particular conditions of electricity, in its connection with material media. General Sabine, whom the labors of a life have rendered our highest authority on magnetic phenomena, has recently, through his papers to the Royal Society, furnished full evidences, from the exact coincidence in time of magnetic changes or disturbances at remote parts of the globe, that these are due to *causes from without*, irrespect-

* These passages, with others equally remarkable, will be found in Sir J. Herschel's volume on the *Nebulae and Double Stars of the Southern Hemisphere*; a volume in which the tabular results of his vast labors of observation are intermingled with some of the highest speculations to which the human mind has yet legitimately reached.

ive of any local conditions of the earth or atmosphere; while in pointing out the correspondence of such periodical variations with the several conditions of the sun, he has shown a direct relation of these phenomena, which we can not refuse to admit. Diurnal or annual changes, subject to this relation, we may indeed in part comprehend; but it needs new elements of knowledge to link together in theory, as General Sabine and Schwabe have seemingly done in fact, the maxima and minima of diurnal magnetic variation, with the greater or smaller number of dark spots present on the sun's surface; a coincidence expressed, as far as the proof now goes, by periods of ten to eleven years; but one so extraordinary in character, that we are bound still to await other similar recurrences before finally admitting it into the records of discovery.

Meanwhile the Moon also has been found, by delicate observations and averages carefully collected, to exercise a magnetic influence on the earth—the needle expressing to human eye certain small variations which strictly correspond with the lunar hour angle. The fact has its peculiar interest in indicating, and this not vaguely, a similar influence throughout the whole planetary system, and possibly far beyond. The magnetic conditions and changes of the earth itself come into direct testimony here; so general and strictly coincident over its surface, as to give us assurance that the total globe is in a definite magnetic state; and capable through this state of affecting other worlds, as well as the little needle which man makes his index here of this mysterious force.

From these vast and remote actions in space around us, we come to those affecting the matter, whether inorganic or living, of the earth on which we dwell. The same great physical forces are still in unceasing action here; with more diversity of effect from the differences of the material acted upon, and from the reflected influence of organic life upon the matter from which it is engendered. We have already spoken of the impossibility of giving more than a glance over this wide field; but such cursory view will suffice to show the magnitude of the objects attained in each science, and the energy which is ever active to forward the work—

τα ἡμέτερα ἐς τέλος ἐξεργάζεσθαι. On one subject, indeed, that of Electricity, though beyond any other prolific of great discoveries, we need say very little, having in a recent review of M. De la Rive's admirable work described its progress, and the wonderful results thence obtained, as well for pure science, as for the practical uses of man. Yet even amidst these marvels of human attainment, it must needs be avowed that we are still at the very alphabet of electrical science. The terms of *positive* and *negative*, though required for practical use and illustration, are little better than barren phrases as respects any real explanation of the phenomena; while the whole subject of *induction* and *conduction*, so essential to a perfect theory of electrical action, is still awaiting more certain and complete conclusions than have yet been obtained. Some single and simple observation may, perchance, furnish the truth desired; and in the very beautiful experiments recently recorded in the Bakerian Lecture of Mr. Gassiot, we willingly recognize one of those various avenues through which research may reasonably be directed towards this object. Nor can we do more here than allude to the discoveries, scarcely less remarkable than those of electricity, which concern the material phenomena of heat. Some of them we have already noticed in their connection or correlation with the functions of the other elementary forces. But there are many besides, due to the various labors of Melloni, Forbes, Herschel, Seebeck, Clausius, Tyndall, etc., which singularly tend to confirm this connection, and to offer other modes of access to those higher laws of force and motion, which we have denoted as the ultimate aim of all philosophy.

If seeking to denote in a few words the most striking characteristic of modern science as directed to matter, we should come at once to the principle of Molecular action, in its present application to physical research. Through this doctrine has been made man's deepest inroad into the secrets of the natural world. No single principle is so variously applicable to every branch of knowledge; none has done so much to promote discovery, or to authenticate and give the form and force of law to the results obtained. And yet it may be said to have had a lawless origin, and to have been long a play of human

fantasy under the garb of science. We can not here travel back to those early speculations on atoms which entered so largely into the staple of the ancient philosophy; and which the poetry of Lucretius has better consecrated to later times than the most subtle prose of the Greek philosophers. In every intermediate age, even the darkest, the atomic doctrine, in one form or other, has kept a certain hold on the minds of learned or speculative men; a natural effect of the facility with which it lends itself to any hypothesis, however crude, regarding matter and material phenomena. It was reserved for our own time to render it at once the subject and instrument of legitimate science; the foundation of laws next to mathematical in scope and exactness, and the most powerful of all aids to ulterior research.

This great achievement, for such it is, we owe mainly to Chemistry; and to John Dalton, the Quaker chemist, more appropriately than to any one besides. Close approaches had been made before to the doctrine of *definite proportions*, as represented by the molecules of matter in their combinations. Such anticipations are recorded in the case of every great discovery. But Dalton (speedily seconded indeed by other great chemists) first gave clear declaration to the principle; and illustrated its applications, mighty in their universality, with a simple sagacity belonging to the genius and habits of the man. The simplicity of his early experiments is, indeed, characteristic also of the manner in which many of the highest truths in science have been reached. Facts the most familiar to common observation, and thence disregarded by common intellects, have furnished better materials and suggestions for discovery than the most recondite theories.

It has been justly said by Sir J. Herschel that *number*, *weight*, and *measure* are the foundations of all exact science. The atomic doctrine has acquired from chemistry these conditions, which give it substance and certainty as a physical truth. When analysis and synthesis, carefully applied to compound bodies, disclosed a constant and definite proportion of the combining elements, and an equivalent or multiple ratio of parts in every chemical change, the requirements of number and weight and measure were all met by the discovery. Numbers became needful to

express the proportion of the combining molecules; and in every case, even of the most complex chemical compounds, they have been found to fulfill this object so exactly, that combinations, yet unknown, may be predicted with assurance as the results of future research. The *absolute weight* of these elementary molecules is unresolved, and will probably ever remain so; but their *relative weight* is known to us through the proportions in which they severally combine; and this method is checked and counter-checked through such vast variety of compounds, that every chance of error is done away. Measure, the third condition proposed, is expressed chiefly in the combining volumes of gases—invariable always, whether under the simplest proportions shown by analysis, or the multiple measures of other chemical compounds.

Here then we have a great law, or group of laws, thoroughly attested; of high generality; and proving, because based upon, that atomic or molecular constitution of matter which alone could afford such results. Whatever name we give to them, these atomic parts exist in all bodies, and determine by their own nature or arrangement the properties and functions of each. That they are minute beyond all human measure is proved, not only by the chemical relations just denoted, but also by those relations to heat, light, electricity, and mechanical force which experiment has demonstrated to us.

No hindrance to belief need exist on this score. When, even in organic or compound material structure, the microscope tells us, by computation, that two cubic feet of the Tripoli slate of Billin contain 140 billions of fossil infusoria—that there are some millions of distinct fibres in the crystalline lens of the cod-fish—and that a single fungus (*Bovista Giganteum*) is composed of cellules far exceeding this number—we infer in reason, though not by comprehension, what the elementary molecules must be, so organized into living forms. Looking to simple inorganic matter, or what we suppose such, we have before us a recent memoir of Faraday's, on the "Optical phenomena of thin Gold Films and Gold Fluids," where in one experiment a ruby tint, equal to that of a red rose, was given to a fluid by a quantity of gold not exceeding $\frac{1}{100,000}$ part of its weight. We quote another instance

from this paper, as well expounding the spirit which prompts and guides these bold incursions into the atomic world. In seeking to procure the thinnest film of gold, *retaining continuity*, for the purpose of noting its effects on light passing through it, he obtained by a chemical action on gold leaf, films not exceeding $\frac{1}{37,640}$ of an inch in thickness. The number of vibrations in an inch of the red ray being 37,640, it follows that each such film can not occupy more than a hundredth part of the vibration of light—a deduction derived in such way from the premises as to compel belief, hard though it be for the imagination to follow it. But if in these, and other cases, the imagination fails, yet reason accepts this next to infinite divisibility of matter, and the conception of polarities and mutual relations of atoms so constituted, as the sole method of expounding the phenomena ever present around us.

Had we room here, we might fairly dwell on the astonishing results already derived from this new method of chemical inquiry, through the atomical combinations of matter; and those especially which bring new laws of action and combination into view; such as the doctrines of *isomorphism*, *atomic substitution*, *homologous series of compounds*, *compound radicals*, *catalysis*, etc., which we owe to the genius and labors of Berzelius, Mitscherlich, Dumas, Liebig, Hoffman, and other chemists. Each one of these laws, thus based on the atomic doctrine, is a special example of that spirit of profound research which we are seeking to denote in the science of our day; while the growth of organic chemistry, in sequel to labors pursued on this principle, is perhaps the most wonderful of the results thence attained. No surer test of truth in any law than its power of predicting events or effects yet unknown. When, for instance, we find in the different series of organic acids, where every step of change is made in multiple ratios of arithmetic exactness, that certain void places left in the first construction of the series are afterward filled up by the discovery of compounds answering *precisely* to the numerical conditions required, we see at once how much has been done towards the deciphering of this secret scroll of nature's innermost workings. Nor is the advancement limited to the simple discovery of what actually exists. The chemistry of our time, bold in all its aims, has succeeded, through this same law of

quantitative proportions, not solely in filling up, by the *creation of new compounds*, the gaps thus deserted, but even yet further, in producing, by the processes of the laboratory, numerous substances absolutely identical with organic compounds, hitherto known to us only as the products of animal or vegetable life. A vast step we must admit it to be; yet subject to the remark, that whereas nature works primarily with the simple or inorganic material elements, the chemist can only elaborate these "counterfeit presentments" from the dissolution and changes of organic compounds already in his hands. The difference here is greater than may appear at first sight; but there is no reason in theory why science should not eventually pass beyond the line and obliterate it.

While especially demonstrated in chemical force and affinities, the atomic theory is far from being limited in application to this single science. We have seen that the other great forces are known to us by their actions on and through matter—such actions and changes, whether from light, heat, electricity, or dynamic force, giving foundation to the several physical sciences which bear these names. Correlated as they all are with chemical phenomena, we might expect some corresponding relation to that atomic constitution of bodies, from which modern chemistry has drawn its greatest discoveries. And accordingly we find numerous and striking proofs to this effect, furnished by those who are seeking to solve experimentally these high problems, and thereby to establish new connections in the sciences, and laws common to all. We might take, as a most instructive example, the various and beautiful phenomena of crystalline bodies in their relation to heat, light, and electricity. The crystal itself, whatever the matter composing it, must be regarded as a substance, the component molecules of which are compelled by a force or affinity (which we may *provisionally* call polarity) to assume certain definite positions, determining both the inner structure and outer form. The three forces just named all affect most curiously this molecular arrangement. Mitscherlich has shown that while octædral crystals expand equally in all directions from heat, other crystals, not in this group, change the measure of their angles with every change of temperature. He has farther shown that great alterations may be effected by heat in the internal structure

of crystals, (as in the case of certain prismatic crystals evolving octædrons under exposure to the sun's heat,) without affecting their solidity or altering their external form.

This latter fact, now attested in various ways, that molecular changes, transient or permanent, may occur within bodies while retaining what we call their solid state, is one of high interest, and scarcely enough regarded in its various applications to every part of physics. The familiarity of some of the instances disguises what is most curious and important in the inferences from them. The simple expansion of a metallic bar by heat involves an atomic change through its every part; less complex it may be than those changes of molecular arrangement within crystals, however produced, which affect the passage of light through them; but analogous in the main fact of the mobility of atoms, and their power of assuming new and definite position within a solid body. We know from recent experiments that an iron bar is sensibly elongated; and the elasticity of iron transiently, of steel permanently, altered by magnetization. We know further that the capacity of iron to conduct heat is variously modified under the electro-magnetic action. We have the certainty, from the effects manifested at its extremities, that every molecule in the wire of an electric telegraph, whatever its length, undergoes change at the moments of transmission or cessation of the electric force. Without stopping to inquire whether such changes may or may not be interpreted as a *tendency* to what we term fluidity, we clearly see in them a proof of the *individuality of atoms*; and very strong evidence that these molecules of matter, minute beyond conception though they be, are endowed individually with axes of motion or polarities, determining their mutual relations, and the changes they undergo when submitted to forces from without. Such conclusions, forced upon us by the simplest view of the subject, are strikingly corroborated by the whole course of modern inquiry; and very especially in those sciences to which the actions of light, and of electricity or magnetism, upon matter give foundation. We might in truth affirm that the highest speculations and most arduous questions and researches in modern physics concentrate themselves upon this point. The most eminent discoveries of our own day involve these qualities and

conditions of the elementary molecules of matter; while the number of problems yet unsolved render this the most fertile and capacious field for future labor. The time may come when molecular forces or affinities, now represented chiefly in chemical actions, may be reduced to a common principle with what we term *mechanical forces*. And if gravitation be ever submitted to some common law with other powers, such law will probably be founded on the nature and functions of these ultimate particles — the *σώματα ἀδιάρητα* of ancient philosophy — the elements through which modern science works amidst the most profound mysteries of the natural world.

Our limits prohibit any details as to those numerous discoveries which illustrate this particular inquiry, or the more general progress of those sciences of optics, heat, and electricity which so variously and wonderfully interpret the relations of matter to the forces acting through or upon it. Some of these discoveries, simple and limited in their origin, have become volumes of new knowledge in their progress. Such are, for instance the discovery of Oersted, on which depends the whole science of electro-magnetism; the doctrine of electrolysis, as established by Faraday in strict fulfillment of the law of definite proportions and equivalents; the still greater discovery of Faraday, that all matter, whatsoever its nature, solid, fluid, or gaseous, is affected in a determinate manner when placed within the sphere or lines of magnetic force; the contemporaneous discovery by the same philosopher of the rotation of a beam of polarized light under the influence of magnetic force directed through glass of a certain texture, followed by those larger researches which establish relations between magnetic force and the intimate structure of crystalline bodies; the whole science and exquisite art of photography; and the beautiful and still more recent experiments of Grove and Neipee, founded upon it, showing the direct action of light upon the molecules of matter to be far more universal, as well as more definite and lasting, than was before dreamt of in our philosophy; and the discovery of *allotropic states* in various substances, as phosphorus, oxygen, etc., where (as in the earlier instance of the diamond and carbon) a total change of physical prospects is produced, the

matter so changed retaining its exact identity of nature.

We name these few instances out of many equally remarkable; all expounding, in one form or other, the great principle of molecular action and relation, to the clear conception of which modern science owes so much of its success. Even the points still open to controversy—such as the true nature of the distinction between pure magnetic and diamagnetic bodies, those which take position parallel to the line of magnetic force, or transversely to it—are clearly seen to depend for solution on more exact knowledge of the modes of molecular aggregation, and their influence on the forces which traverse them. Again, we have the question, before noticed, as to the phenomena of electrical induction through air, glass, and other media—whether these are due to some unknown physical causes, or to molecular polarities and motions, far removed from all cognizance of the senses, but interpreted to our reason by the closest experimental analogies? Faraday has given the sanction of his opinion to this molecular view of the phenomena; and Grove has done much to strengthen and extend this important conclusion.

We have hitherto been speaking of matter generally, without regard to the various aspects under which it is known to us. For with all the refinements of modern analysis, there still remain about sixty substances *undecomposed*, and which must therefore be deemed simple or elementary to our present knowledge. Of these the largest proportion are what we term metallic bodies, and most of the additions recently made to the list of simple substances belong to this class; with the further curious specialty pertaining to several of them, that while perfectly distinct from all others in physical characters, they are hitherto known to exist in a few rare specimens only. Almost we might be tempted to surmise that they belong to the number of those materials of which aerolites seem to tell us that other worlds are made; and that they are present there much more largely than in the feeble representation of their existence on our own globe. Such suggestion, however, must be received simply as illustrating the manner in which modern science attaches facts already attained to problems yet unresolved; concentrating them as it were

around common *foci*, towards which they ever more closely converge.

The great problem regarding these many modes or kinds of matter on our earth lies in the question, whether and how they may be lessened in number by reduction to certain elements, common to several or all? Whether, in other words, bodies simple to our present knowledge are actually compound in their nature? Chemistry, it must be owned, has hitherto done little directly towards solving this question; the vast resources of analysis having tended to multiply elements upon us rather than to abridge their number. Some approach in this direction has, however, been made through the law of isomorphism; which, in showing relations of mutual substitution between certain elementary bodies, having other curious resemblance of physical properties, has led to their arrangement in groups; preparatory, it may be hoped, to some future discovery which will give a common basis to all the bodies thus related. The most remarkable of these groups is that comprising chlorine, iodine, and bromine. Arsenic and phosphorus, selenium and sulphur, are other examples of these combinations; to all which, in connection with the law of definite proportions, the labors of the chemist are sedulously directed; not solely for instant results, but with the prospect continually before him of those higher truths, to which some one single discovery may perchance open the way. The present methods of chemical inquiry are peculiarly fitted to this *critical examination* of the simple bodies. Electricity, equally powerful and delicate as an instrument of analysis, has been, and must ever be, an especial aid—probably the most effective of all—in the prosecution of an object worthy of all the labor and genius that can be given to its attainment.

Oxygen, hydrogen, and nitrogen are the three elements which furnish what we may fairly call the *crucial problem* in this part of science. Embodying themselves with all other forms of matter by the most complex affinities, and in compounds of infinite variety, no art or force has yet succeeded in showing them to us singly otherwise than in the gaseous form. The powers of analysis, whether chemical or electrolytic, utterly fail when put to trial upon them. A recent discovery, indeed, has shown us oxygen under the new or

allotropic form of ozone; but no analogous transformation has hitherto been effected on the two kindred elements. Mighty though the power and efficiency of this one is in every part of the natural world, we must avow a still deeper interest in the scientific fortunes of nitrogen, and a belief that it is fated to disclose still more to future discovery. Its history down to the present time has been one of paradox throughout. Known as a simple gas chiefly by its negative qualities, and in this state capable of direct union with only one or two bodies, (as titanium and boron,) nitrogen shows itself in combinations, otherwise effected, as one of the most strange and powerful elements with which chemistry has made us acquainted. We inhale it largely with every breath, seemingly but as a diluent to the oxygen, with which it is mixed in our atmosphere. We take it into the system as a constituent of food, and find it forming an integral and essential part of the animal textures; while to compounds differing but in slight proportion of their elements, it imparts the character of the most virulent poisons. These incongruities, which might seem to render research more difficult, do in truth afford more ample materials and room for discovery. Certain approaches have already been made in this direction of inquiry; and we should wrong the spirit and resources of modern science were we to doubt its reaching yet much nearer towards the ultimate truth.

In passing thus cursorily over the sciences which deal with the various forms of matter in our globe, and the forces affecting them, we have said nothing of that science now become so vast in its objects and methods, which takes as its province the outer structure of the globe itself; and the changes, organic as well as merely material, succeeding one another for ages on that surface which is now the dwelling place of man. Such seeming omission we may explain by reference to a previous article in this Number, in which

the present aspect of geological science, and the questions it involves, have been considered at some length. We may remark further that Geology has (within the last thirty years more especially) undergone a change which raises it far above the mere history of the location or dislocation of strata, and connects it inseparably with other branches of science still more fruitful of discovery. Fossil Geology, the creation of our own time, is allied in every part with the history and physiology of animal and vegetable life—that great domain of knowledge which, though closely encircled round by physical laws and phenomena, and approached only through these, has still a secret region within, the law and principle of life, hitherto inaccessible by any method of human inquiry. It was our original design to have included this latter subject in the present article; as illustrating, not less than other branches of science, the advances made in actual knowledge, and the spirit which impels and animates to further research. While admitting that this spirit has sometimes run riot upon questions the very mystery of which invites and emboldens speculation, we find true inductive science moving steadily onwards, amidst these more erratic courses, to those truths—the *κρίμα ἐς αἰεί*—which are the certain reward of all legitimate inquiry. So much however, has recently been attained in animal and vegetable physiology, that not even the briefest summary could bring it within our present limits; and we must postpone till some future occasion, if such should occur, our notice of these eminent discoveries, and of the works which best describe and illustrate them. What we have just drawn from other branches of physical science will, we trust, adequately fulfill our intention of showing in what spirit such science has been recently pursued; and with what signal success in compassing and expounding the great phenomena of the natural world.

From Fraser's Magazine.

TELEGRAPH CABLE LAYING IN THE MEDITERRANEAN,

WITH AN EXCURSION IN ALGERIA.

Crossing the ferry from Birkenhead to Liverpool on a sultry morning towards the end of last August, just at the hour when mercantile men were passing from their snug retreats on the Cheshire side to their places of business on the other, general attention was directed to a screw-steamship of considerable burthen, then lying in the stream of the Mersey. She appeared to be outward bound, for her steam was getting up, and the last but not the least important operation of hoisting on deck an abundant supply of bleating, grunting, and cackling live-stock, besides hampers of all sorts, promising good cheer, was going on. Practiced eyes easily discerned that the queer-looking, long, black-sided vessel, so heavily laden and deep in the water, was not one of those employed in the ordinary traffic of the port of Liverpool; but no one even conjectured what was her cargo, or what her destination. An hour afterwards she was steaming down the Mersey, with the writer of these pages on board.

Few indeed among the enterprising and intelligent inhabitants of this busy place had any idea that there was coiled in the hold of the Elba—for that is the ship's name—thus unostentatiously leaving their port, the first of a series of submarine telegraph cables, extending in the aggregate over nine hundred nautical miles, which before the year's end were safely laid in the depths of the Mediterranean. These lines connect the continents of Europe and Africa as well as other important points; one of them, Malta, being a step in advance towards communication with India. No public notices announced the preparations for, or the departure of, the expedition. The contracts for these great operations, equal in extent to considerably more than one third of the Transatlantic line, were undertaken by a single firm at their own risk; and they set about it and completed it like men of business.

If few turned their attention to the departure of the Elba with its important freight, fewer still would have been disposed to augur well on the success of the enterprise on which she was employed, had they been aware that the difficulties to be encountered were of the same character as those to which the then recent failure in the operations of the Transatlantic Company was attributed, namely, the great depth of water in which the cable had to be submerged. Perhaps it is not generally known that the soundings in the Mediterranean, for considerable portions of the lines laid in that sea, give the same results as those on part of the Atlantic line; showing a maximum depth of 1700 fathoms, or two and a quarter miles. Those also who knew that three previous attempts to lay the African cable had already proved abortive, might have been still more incredulous as to its accomplishment.

At the present moment, when public attention is so much turned to the renewal of the enterprise of the Transatlantic Telegraph Company, as well as to similar undertakings contemplated in the Red Sea and the Indian Ocean, a narrative in some detail of the operations connected with the submersion of the African cable, the first successful enterprise in deep-sea telegraphy, may not be uninteresting. Its practical results solved the problem, whether submarine cables could be laid in certain great depths of water, a question surrounded with many difficulties. Such operations must, indeed, be always attended with serious risks; but after the experience gained, and the note of preparation sounded for many months, it may be reasonably hoped that ere these pages issue from the press the powers of science and mechanical skill will have proved as triumphant in the Atlantic as they have been in the Mediterranean. The narrative will show how such triumphs

are achieved; nor can there be any want of incidents in an expedition of so novel a character, having the glorious shores of the Mediterranean for its field, to add interest to the story.

The passage to the Mediterranean on the route eastward has now become so familiar, that the narrative might well commence with the scene of action on the coast of Algeria. Often, however, as it had been the fortune of the writer to visit the shores of that glorious inland sea—glorious in the physical features of its islands and coasts, as well as in the historical reminiscences with which it is associated—he had always approached it by land routes. The voyage therefore, from the Mersey through the Straits of Gibraltar, formed an additional attraction in his plan of joining the present expedition. Though sometimes delayed by contrary winds, when the vessel rolled and pitched heavily from the great weight of the coil of cable, the voyage was highly enjoyable and full of interest. Every Englishman must view with a just pride the rock-fortress commanding the passage into the Mediterranean; but St. Vincent and Trafalgar might perhaps be objects of keener interest to one who had watched the course of events from the earliest years of the present century, than they can be to the men of this generation. Swept through the Straits by that equable current which, ceaselessly flowing, *labitur et labetur*, from the Atlantic, replenishes, without either reflux or overflow, the great Mediterranean basin, doubts not unreasonable suggest themselves to the curious observer as to the theories proposed by science respecting this strange phenomenon. Nor can the memorable “pillars,” which he sees rearing their hoary summits on either shore, fail of recalling to the scholar’s mind the traditions of early times, when Phœnician and Libyan navigators, boldly penetrating these mysterious barriers, carried with them to the shores of the ocean those arts of civilization which, step by step, their colonies had introduced along the coasts of the Mediterranean. After a long course westward, the mighty stream of human progress, controlled by other, but not less wisely organized, laws than those which direct the ocean currents, has now become reflux. It bears back towards its source the matured fruits of a cultivation planted in the earliest ages in lands

then almost beyond the pale of humanity, but now yielding a rich return to the countries from which it sprung. Among numerous recent proofs of this reaction, none could more forcibly strike a thoughtful mind than that afforded by an enterprise such as the present, intended to link by a chain of rapid communications the northern coast of Africa and the adjacent islands, the chief seats of the first colonization from the East, with the continent of Europe.

But not dwelling on such recollections, the interval of the voyage to the scene of action may be usefully employed in giving some account of the project, finally accomplished, after repeated failures, by the submersion of the African cable. We may conclude with a rapid sketch of the other lines of submarine telegraphs in the Mediterranean already completed, or still in embryo, but bidding fair to be carried into execution.

The history of the project of which the African cable was the final accomplishment may be shortly told. The object was to connect the French island of Corsica and their province of Algeria, as well as the intermediate island of Sardinia, with the continental lines of telegraph. The project was originated in 1853 by Mr. W. Brett, and a company was formed *en commandite* to carry it out, composed of French and Italian shareholders, and of which he was the *gérant*. A concession was obtained from the French and Sardinian Governments, with a guarantee of certain rates of interest proportionably to the advantages they would derive from the undertaking, provided the works were completed within a limited time. The line started from a point in the Gulf of Spezzia, whence, crossing the Tuscan Sea by a submarine cable about ninety miles in length, it landed in Corsica at a point of Capo-Corso, its northern extremity. The wires were then conducted through the island, partly by subterranean channels, to Bonifacio. Thence, submerged in a cable crossing the Straits, about ten miles in length, they were brought to land at Capo Falcone, on the northern coast of Sardinia. The wires were run through this island, still in a direction almost due south from the original starting-point, to Cagliari, the capital.

Nothing now remained for the completion of the project but to lay a submarine cable across the Mediterranean from the

island of Sardinia to the nearest point of land on the African coast, which is found in the neighborhood of Bona, a town in the eastern district of the French possessions in Algeria. This was of course the most arduous part of the undertaking, from the great depth of water in the line between the two points, it ranging for a considerable distance from 1500 to 1700 fathoms. Mr. Brett contracted for the execution of this work, and personally directed the operations, but unfortunately three successive attempts to lay the cable failed.

These disasters exhausted the Company's finances, and occasioned great dismay among the shareholders, and the time limited for finishing the works had nearly expired when, in the summer of 1857, Mr. Brett, as that Company's *gérant*, applied to Messrs. R. S. Newall and Co. to undertake the manufacturing and laying down the cable. The members of that firm had gained more experience and achieved greater success in such works than had fallen to the lot of any other persons engaged in similar operations, having during the Crimean war laid down between four and five hundred miles of submarine telegraph cable in the Black Sea. After, no doubt, duly weighing the difficulties of the undertaking, the overtures made by Mr. Brett ended in their contracting with the "Mediterranean Telegraph Company"—such being the title assumed by the Sardo-French Company—to manufacture and lay the African cable at their own risk for a fixed price.

About the same time they also entered into engagements on similar terms with the "Mediterranean Extension Telegraph Company," established, we believe, by a body of Austrian shareholders, for laying down submarine cables between Cagliari and Malta, and Malta and Corfu, wires extending over 795 nautical miles, and making, with the African cable, a total length of 920 miles.

It may not be out of place here to say a word about the depths of the Mediterranean, a subject intimately connected with these submarine enterprises. In its physical aspect this midland sea may be considered as divided into two great basins, intersected by the lower extremity of the Italian peninsula, which, with the island of Sicily at its base, blocks up the channel between Europe and Africa to a strait not exceeding eighty miles in

breadth. For at this point Cape Bon, protruding northward, forms the extremity of that part of the African coast, the Tunisian territory, which, changing its usual direction, stretches out its arm, as it were, to meet the advances of Europe towards it. Admiral Smyth observes in his valuable *Memoir on the Mediterranean*, that "perhaps its most remarkable feature is the perfect hydrographic division into two great basins by the form of its bottom; thus confirming the allotment made by geographers from a study of the form of its shores." The Admiral remarks that "the barrier at the entrance of the Straits [of Gibraltar] marks the commencement of the western basin, which descends to an abysmal profundity, and extends as far as the central part of the sea, where it flows over another barrier, and again falls into the yet unfathomed depths of the Levant basin."

The greatest depth of water is found in some parts of this, the eastern and largest of the basins. It is reported that soundings have been taken about 90 miles east of Malta to the amazing depth of 15,000 feet; and between Cyprus and Egypt 6000 feet of line have been run out without reaching the bottom. These are the results of single experiments; but it appears from a regular series of soundings lately made from Egypt to the Archipelago, that between Alexandria and Rhodes the bottom was only found at the depth of 9900 feet, and between Alexandria and Candia the soundings were upwards of 10,000. The western basin of the Mediterranean, having the beautiful islands of Corsica and Sardinia nearly in its center, has been the focus of an extensive volcanic action, both submarine and subterranean, of which *Ætna* and *Vesuvius* are existing witnesses. The course of the Phlægrean fires may be traced from the Lipari Islands to the Campagna of Rome. In the Island of Sardinia they have been especially active, a large tract of the vast Campidano being studded with round-topped hills, the craters of extinct volcanoes, and the Plutonic formations appearing in many parts of the southern and western coasts. Whatever may have been the disruptions caused in ages long remote by this extensive and violent igneous action, to which probably these coasts and islands owe much of their present configuration, it does not appear that the depths of the Mediterranean, as far

as they have been plumbed, are any thing like so great in this western as in the eastern basin. But we find that even in the Straits, between Gibraltar and Ceuta, nearly 6000 feet of line have been run out without meeting the bottom; and further to the westward no soundings have been obtained. Fortunately, in the lines of telegraph cable already laid in this basin, the depths, though opposing serious obstacles to the enterprise, have not been found so great as to preclude its success. They appear, however, to be only just within the compass of the machinery and the structure of the cables at present used in these undertakings, as Mr. W. Siemens, C.E., remarked in a paper lately read before the Society of Arts, that "upon calculations of the strain of the cable in leaving the vessel, an iron-sheathed cable can not, under the most favorable circumstances, be laid in water more than three miles in depth."

After passing the Straits we ran along the coast of Spain, enjoying a delightful day, during which the snow-clad summits of the Sierra Nevada were full in sight; and a still more delicious evening, walking the deck to a late hour, till the planet Jupiter set over the mountains, and the land-wind wafted fragrant airs from the Andalusian shore, and a lustrous moon sparkled in the ripples of the tranquil sea, silvering every jutting rock and cape on that romantic coast. The vessel's course for Bona was then laid nearer the African shore than the usual route of ships bound to Malta and the eastward. As she steamed along this coast, Algiers spread out its white glistening terraces, rising on the slope of a hill and backed by the chain of the Little-Atlas. Further eastward the mountain-chain approaches the shore, to which its broken ridges formed a bold frontage during the rest of our course. We neared it between the Capes Matafon and Bougaroni, having been out of sight of land while crossing the mouth of the deep bight in which the town of Bougia stands. It was a sultry evening after a day of intense heat, and a dense steamy vapor, white as snow, hung round the bases of the mountains. All this coast has a wild and desolate aspect. It consists of rugged cliffs washed by the sea, and hills covered by dwarf scrub, with occasional patches of cultivated land; and the ferocity of the neighboring tribes of

Arabs, or rather Kabyles, is said to be in character with this savage scenery.

Rounding the Cape de Garde, the Ras-el-Hamrah of the natives, the scene suddenly changed to one of lively interest. Gayly-painted boats engaged in fishing for coral, each with a dark Moor in her stern, were scudding under the fresh breeze which just curled the blue water of the sheltered bay, in the curve of which stood a solitary marabout's domed cell, the fisherman's house of prayer. A French steam-frigate, with two other war steamships under the Sardinian flag, lay at anchor waiting the Elba's arrival, the little squadron being under orders from the respective Governments to attend on and assist in the operations. Facing the harbor we see the old Arab town of Bona rising from the water's edge to the Casbah or citadel, which, with the minaret of the principal mosque, crowns the fortified heights. These are backed by the lofty chain of Mount-Edough, and the eye rests with pleasure on its green slopes, when weary of gazing on the arid coast where no verdure appears but patches of cactus defying the burning heat. On the shore are the tents of the Bedouin salt-merchants, with their camels lying on the sand, and their small lean horses picketed to the ground. To the left spreads a vast plain bordering the sea and extending far inland along the course of the Seybouse; and you see a green hillock rising out of the plain, where stood the ancient city of Hippo-Regius, from the ruins of which Bona was built.

Though a picturesque object from the sea or the mountains, the interior of this place, like most other southern and eastern towns, is a labyrinth of dark narrow streets. The French have made some clearings, particularly in forming the street leading to the Constantine Gate. But their main improvements are concentrated in a square, the Place Rovigo, three sides of which consist of lofty houses, with balconies and arcades, and shops and cafés on the ground floor, in the true Parisian style. The fourth is occupied by an old mosque with its slender minaret. Here we find some antique pillars, relics perhaps of the Basilica of Peace at Hippo, or of the Temple of Venus at Aphrodisium, the Roman town on the site of which the modern Bona is built. You see no furniture in the

mosque but the Imaum's wooden pulpit facing towards Mecca, and the mats on which the slipperless worshipers kneel at their devotions. The French have built a large church outside the town, a fantastic building in no regular style of architecture, but pretending to the Romanesque. Though still unfinished, it has already cost £8000. It is said that Bona is more backward in civilization than any other town occupied by the French in Algeria, though the Government has laid out large sums in its improvement, the expenditure from 1834 to 1850 having been nearly £140,000. More than one half of this has been devoted to fortifications and barracks; the civil works consisting of sewers, water-conduits, a douane, prison and tribunal of justice, a school and cemetery, squares and promenades. The population is about 12,000, of whom one third are French and the rest natives or foreign immigrants, the Maltese forming by far the largest class of the latter.

The Moorish houses, crowded in narrow streets, are generally low buildings surrounding an interior court, with a gallery above opening to a number of small chambers. The house in which the writer lodged while the ships were at anchor in the bay, had the Oriental terraced roof common to almost all the houses at Bona. One side of the court contained baths; and round it vines, entwined on the pillars supporting the gallery, ran up to the flat roof, where these and flowering shrubs were trained on bamboo canes. In the corner of this terrace, and resting on it, stood the small apartment assigned to the stranger—the very counterpart of the “little chamber on the wall,” lightly constructed, and furnished with “a bed and a table, a stool and a candlestick,” in which the prophet Elisha was lodged by the Shunamite woman. Every one has heard of the share these terraces occupy in scenes of Eastern life, and may imagine the delight of escaping to their freshness from the close chambers below, in the cool of the evening, and during the warm clear nights of such countries. Delicious was the hour spent on that terrace, at Bona, when long before the dawn of day, the “stranger,” starting from his bed, stepped out on the solitary platform. All was still in the variously peopled town beneath, till the muezzin called the faithful to prayer from the gallery of the minaret just opposite, which, silvered by the

pale moonlight, raised its slender spire to the blue vault of heaven. On the other hand, the towering heights of Mount Edough seemed to hang over the sleeping town in a mass of deep shade. Presently the cathedral bell tolled for the first mass. The religious sentiment was mingled in the reveries of the silent hour. It found utterance in the summonses to early prayer, however various their forms; but perhaps drew its deepest inspirations from the contemplation of the starry heavens and the primeval mountains, on the solitary “house-top.”

A slight stir in the vine-trellised court below recalled the thoughts to earthly things. Looking over the parapet a form, almost as lightly clad as the sojourner, in flowing white, was seen flitting about. Our “Shunamite woman” was preparing to light the stove of her baths—delicious idea in such a climate, and after even a fortnight's voyage, though buckets of sea-water had lent a very salutary aid to the usual ablutions! Then, after the customary small cup of hot coffee, it was not too early for a visit to the market, always an attractive scene to the curious traveler. That of Bona is held on a sort of boulevard outside the walls. What heaps of fruit—melons, pears, apples, peaches, figs, pomegranates, oranges, grapes! What loads of vegetables, with earthen vessels containing curdled milk and butter, spread out for sale! And what striking groups; the country Arabs in their white bournouses, or even sheepskins; and the Maltese gardeners, who seem here to fill the same place as the Malays at the Cape colony and throughout the Indian seas; and with much the same character. In each case all the petty trade is in the hands of the immigrant race. They are porters and coolies; they thrive alike in the market and the shop, being keen, thrifty, and industrious, but roguish and irascible.

Let us mount the Arab steed provided by the kindness of the British Vice-Consul, and ride over to the ruins of Hippo-Regius, the worthy Consul being courteously our guide. Just out of the town we meet an Arab sheikh dashing on at full speed, richly accoutred, and followed by a ragged retinue, bare-legged, with the naked toe in the stirrup. Commend us to flowing robes, except on horseback! The bournouse hangs and folds as gracefully as the toga; and a Moor of rank, in

an attitude of repose, is as grave and sententious as a Roman senator. We ride slowly through olive grounds and groves of fruit trees, affording a grateful shade; for though the sun is descending towards the west, the heat is still great. The ancient city of Hippo stood on and encircled two mamelons rising out of the plain, in full view of what is now called the Gulf of Bona. It was a considerable city, the ruins extending over nearly a hundred and fifty acres, the soil of which is said to be full of foundations of houses, of tombs, and fragments of statues. We ascend the highest mamelon, about two hundred and sixty feet above the level of the plain, or the sea—which is the same thing here—winding through tangled brakes, among wild olives, fig-trees, and jujubes. No trace of the once opulent and powerful Hippo-Regius is seen above ground. Underneath lie open some vast cisterns of solid masonry, supposed to have been supplied with water from Mount-Edough by an aqueduct, five arcades of which still exist. But little known as a favorite residence of the Numidian kings, or as the seat of a Roman prætor, Hippo-Regius derives its celebrity from being associated with the name of the great St. Augustine. Here he labored as priest or bishop for forty years. In the shade of the now ruined porticoes he applied his acute mind to the solution of those deep problems which involve the mysteries of man's nature and the Divine attributes. Here he wrote his *Confessions*, the *City of God*, and his *Book of Recantations*; and, on the invasion of the Vandals, here he penned that last of his Epistles, addressed to Pope Honoratus, which displays a humility, patience, and courage becoming a Christian bishop, and worthy of his great name. To use the words of an eloquent traveler, "The wind sighs through those now deserted courts from which the venerable St. Augustine so nobly combated the ruinous march of Roman luxury, and those various heresies which then tore the Christian Church in Africa. And was it not within those walls that, borne down by the evils which assailed the Empire and the Church, he died? Vandal shouts ringing in his ears, as, in pursuit of the unhappy Boniface, they filled the courts of Hippona with their Arian hordes." St. Augustine died August 28th, 429; and the city being taken by Genseric in De-

cember of the following year, most part of it was sacked and burnt; but the Bishop's house, and his library in the Basilica of Peace, were spared. His remains were afterwards snatched from the violence of the Vandals by the two hundred orthodox African bishops who found a refuge at Cagliari, in Sardinia. Thence Liutprand, King of Lombardy, removed them to Pavia; and the relics rested under the roof of its magnificent duomo, till a few years ago the French Government restored them with great pomp and ceremony to Hippo. On the side of the ruined aqueduct, near the top of the hill, stands an altar of white marble, which serves for the pedestal of a diminutive statue of St. Augustine in his episcopal robes. It is surrounded by a circular fence of light iron pales, the ring being planted with lilacs and honeysuckles. At the time we saw it, wreaths of *immortelles*, hanging on the rail, had succeeded these flowering shrubs; the whole affair being, to our apprehension, in the worst possible taste.

The summit of the highest of the twin mamelons, the Bounah hill, commands a wide view of the vast alluvial plain bordering the Mediterranean, and extending as far as and beyond the river Mafrag, which also runs through it in a course parallel with the Seybouse. Though now parched by the great heats, its rich verdure after the rains could be easily conceived. The immense ricks of hay we saw in riding out of Bona proved the abundance of its produce; and its splendid pastures are said to have afforded to Ahmed, the bey of this province, the means of paying his annual tribute to Algiers, and of pocketing 100,000 francs. Being once in difficulties from immediate want of money, the plain of Bona alone gave him 500,000 francs in the space of a few days. There are 70 square leagues of this vast level, with a surface of 110,000 *hectares* (275,000 acres,) most of it cultivable land; a fine field for colonization, were it not that the climate is very unhealthy, like all the neighborhood of Bona, from the exhalations of the marshes and lagunes. A good system of drainage and judicious planting would be the best sanitary remedies; but in general the French have no genius for extensive agricultural operations, and this fine country, which in ancient times contributed largely to supply the granaries of Rome, is likely to continue a desert. Even the

agricultural colonies planted about Bona and on the road to Philipville—Penthièvre, and others—are represented as being in a doleful condition. The present province of Constantine, with part of Tunis, as far as the river Leptis, near Cyrene, formed part of the ancient Numidia. The solitary mounds of Hippo overlook the classic soil of the kingdoms of Massinissa and Jugurtha. We cantered up the rich valley of the Seybouse in the very track along which the bold and crafty Numidian led his fiery Massylian cavalry, restraining their ardor by a feigned retreat until he drew a pro-consular army, thirsting for the royal treasure he had deposited in a mountain fortress, into the defiles of the upper valley of the Seybouse, and compelled it to pass under the yoke.

Let us change the scene. In another excursion we turn our backs on the pestiferous marshes of the Seybouse and the Mafrag, and climbing the Djebel-Edough, inhale the pure mountain breezes. The road leads among the gardens surrounding the town with a luxuriant growth of fruit-trees and vegetables, sedulously irrigated by that most industrious class of colonists, the very refuse of Spain and Malta, who, never idle, "cultivate the land by day and cut throats by night." My friend, the vice-consul, said that the Maltese give him a great deal of trouble. But for them his office would be nearly a sinecure; they are almost the only British subjects with whom he has to do, there being little or no commerce between English ports and Bona. So it is with the Ionian Greeks in the East; and it may be truly said that the Union Jack has to cover a multitude of sins. The pass over the Djebel-Edough is gained by a well-engineered road, winding through the shaggy brakes with which the slopes and hollows of the mountain are overspread. This stunted vegetation consists of the cistus, the lentiscus, and a score of other hardy shrubs, which, in spite of the heat, carpet also the verdure-clad islands of the Mediterranean lying nearest the African coast. Others prevail still more fitted to endure the scorching heat; such as the dwarf-palm, *Chamærops humilis*, issuing from a large bulbous root, said to be edible, and which the sailors of our squadron, while it was anchored near the shore, carried off, mistaking them for a species of onion. The industrious inhabitants of the mountain make a sort of broom, as well

as baskets, of their fibrous and fan-like leaves, carrying them to the town for sale.

We visited one of their settlements; it was not an encampment, but more like a Kaffir kraal, such as one sees at the other extremity of the African continent. The poor tribe dwelling in the recesses of Mount-Edough are Kabyles; and according to French writers, the Kabyles differ in all things from the Arabs. The first live under roofs; the last under tents. The Arabs are a nomad race; the Kabyles delight in a settled life, and have fixed habitations. The Arab detests work, he is essentially idle; he tends his flocks, but tills the ground only from necessity. The Kabyles are great cultivators, growing lentiles, peas, beans, onions, and many other vegetables, making their own implements, and even arms, and planting fruit-trees of various sorts. The Arab shuns the towns, the Kabyles seek work in them, and labor as masons and gardeners; yet they are very unsociable, and hostile to the Arabs as well as the French. They differ also in their physical characteristics—the Kabyles being generally fairer than the Arabs—and in their language; for, as M. Carette observes, "the Arabs correspond to the French families who speak the *langue d'oc*," and most of the colonists come from Provence, "with southern imaginations personifying material forms; while the Kabyles have a northern precision of thought and expression, confining themselves to an exact and critical statement of facts." The Kabyles or Berbers are probably descendants of the aboriginal race which inhabited the whole of northern Africa before the Phœnicians colonized the coast. In a word, they are the conquered, the Arabs the conquering race. The Kabyles of the Djebel-Edough appeared to be part of a broken and impoverished tribe. The settlement we visited consisted of about a dozen huts, constructed of bamboos watted with twigs and covered with straw. About twenty small cows and a herd of goats, guarded by fierce dogs which resented the approach of strangers, were browsing among the stunted bushes, and a few patches of cultivated ground had been snatched from the surrounding waste. The women were at work in the huts, neatly making the brooms already mentioned; the men were sullen. No milk was to be had. The interior of the huts was wretched and dirty, without furni-

ture of any kind, or even mats, and with scarcely the most necessary utensils. A Kaffir kraal on the banks of the Keiskamma is a palace compared to these Kabyle huts. We have often slept with the greatest comfort in the one; we could not venture to sit down in the other.

About a league and a half west of Bona, the lofty promontory of Cape de Garde, well called by the natives, from its deep red color, the Ras-el-Hamrah, surmounted by a lighthouse, juts out towards the coast of Sardinia. A little to the eastward of the cape we find a little cove with a sandy beach, the appointed rendezvous of the squadron employed in the service of laying the submarine cable. The cove is surrounded by shelving cliffs of a friable schistose and micaceous granite. There is a gradual ascent of about half a mile from it to Fort Gênois, the spot fixed upon for a temporary electro-telegraph station during the operations. The fort, a strong square building of solid masonry, the walls being of a dazzling whiteness, stands on the edge of the cliffs, the base of which is washed by the sea. This desolate post, surrounded on three sides by the scrubby waste, is occupied by a small detachment of French infantry under the command of a sous-officier, who courteously invited a rare visitor to share his frugal meal of potage and haricots; and observing that the stranger's light Maltese basket contained specimens chipped from the rocks below, as well as tools, a ship's biscuit and a bunch of grapes, the obliging Frenchman added to the collection some corals and shells gathered on the shore. The foundation of the fort, as its name implies, is attributed to the Genoese. It is stated that having obtained a monopoly of the coral-fishery on the coast, while Bona was subject to the kings of Tunis, they built this fort for the protection of the fisheries; but an Arabic inscription on the wall over the gate seems to indicate another and an earlier origin.

While the ships were detained at anchor in the roads off Bona, the telegraph cable and machinery became objects of great interest, the authorities, both civil and military, with people of all classes, flocking on board to indulge their curiosity. It was whispered, however, that the officials viewed with no very favorable feelings proceedings tending to abridge the discretionary powers hitherto, it is supposed,

rather freely exercised by Algerine functionaries, and placing them directly under the eye and at the beck of the home government. The electric telegraph is a wonderful instrument for promoting the centralization of authority; and in the new arrangements for the administration of affairs in Algeria, the Imperial government appears to have speedily availed itself of the facilities afforded by the African cable.

The wind having changed, with a promise of fair weather, the squadron ran up the coast, and dropped their anchors in the cove just mentioned. The Elba's stern being brought round to the land, and a kedge and hawser carried out, she was warped in and moored within a cable's length of the sandy beach. While preparations were making for landing the shore-end of the submarine cable and connecting the wires with Fort Gênois, the little cove presented a gay and busy but thoughtful scene from the rocks above. It was a calm, bright day, and only a light ripple stirred the sparkling surface of the blue sea across which our path lay to the Sardinian coast. Below were seen floating in the breeze, as one after another the French and Sardinian frigates took up their stations outside the English ship, the flags of the three Christian States recently allied in bridling by force of arms the arrogant encroachments of a semi-barbarous Power in the East of Europe, and opening the commerce of the Black Sea and the Danube to the enterprise of the western nations. They were now united in the peaceable operation of linking Africa to Europe by that wonderful machinery which may prove an important step towards extending civilizing influences into the heart of the continent most needing them.

But presently the frigates' eight-oared boats are seen dashing off, in neat trim, to assist in the operations, and at intervals some of the party on shore found leisure to bathe under shelter of the rocks and in the cool caverns into which they were worn. Meanwhile, Maltese laborers were indolently digging a channel in the sand for the shore-end of the cable, and fixing the posts for the wires to Fort Gênois. During the heat of the day they had lounged in the shade, and towards sunset they threw down their tools, though their task was yet unfinished. The Englishmen on shore, of all ranks, labored with a will to complete the excavation, and then some

of them, wading into the sea, vied with each other to be the first in the long line which landed it on the shore of Africa.

An hour after sunset the squadron weighed anchor and steamed out of the cove, the engineers commencing the operation of paying out the submarine cable. The Elba was towed by one of the Sardinian steamships, the other going ahead, and the French frigate taking her station on the English ship's starboard bow. It being now dark, the cable was paid out cautiously till the machinery had got into working trim, the speed at first being only three knots per hour. By midnight we had made about 17 miles, the speed having been latterly increased to four or five knots per hour. At this time only 21½ miles of cable were run out, the slack being much less than the average allowed. The light on Cape de Garde was still seen twinkling astern. The ships carried bright lanterns at their mast-heads, and thus the squadron swept on in the darkness, the French frigate, the Brandon, steadily keeping her place on the Elba's quarter, the Monzambano towing, and the Ichneusa, a Sardinian corvette, flitting about, now here, now there, like a phantom ship, and occasionally throwing up signal rockets. On board the Elba the service was conducted with perfect order, Mr. R. S. Newall and Mr. C. Liddell directing all the movements, but taking their post at the brake, which they seldom quitted for a moment. M. Werner Siemens of Berlin, the first telegraphic engineer in Europe, engaged by the contractors to superintend the instrumental operations, was now on board with a staff of German telegraphists, employed in testing the insulation from time to time by communicating with the station at Fort Géniois. There were also the Chevalier Bonelli, Director-General of the Sardinian telegraphs, with M. Delamarch, a distinguished French engineer *decoré* with the Legion, commissioned by their respective Governments to watch the operations. All this while the strain on the cable was gradually increasing, as it fell into deeper and still deeper water; the cable whirling its sinuous folds from the coil in the hold, and tearing through the iron rings and along the confining channels on deck till it plunged into the depths beneath with an unceasing roar which may well be compared to that of a cataract rushing over its rocky bottom.

At two A.M. the soundings had reached

1500 fathoms, and the ship was going steadily at four knots an hour, with a loss on the cable by slack of twenty or twenty-five per cent more than the distance run. At day-break Galita Island was in sight about thirty-five miles S. E. of our course, the African mountains being still visible. The sunrise was exquisitely beautiful, the sea perfectly calm, and all promised well, except that apprehensions began to be entertained that in the depths of waters still to be crossed, the maximum being 1750 fathoms or 2½ miles, the loss on the cable would be so great that it might not hold out. The strain on it was therefore increased to four tons per mile, and the speed of the vessel kept to five knots per hour, while a deluge of water raised by the "donkey engine" to cool the regulating-wheel, drenched those who were stationed at the brake like a constant shower-bath. Soon after sunrise, the attending ships closed in, and their evolutions during the day, sometimes nearing the Elba, at others starting off towards vessels crossing her track, and acting the part of a protecting convoy, were full of interest.

About noon one of those accidents occurred, inevitable probably in such operations, and the fatal consequences of which can only be averted by well-directed action. It is absurd to talk of automatic machinery: the less cumbrous and complicated it is the better, and the simplest has been found equal to meet all exigencies in practiced hands. Very much depends upon nice and wary manipulation of the brake. Length and weight are surely ingredients in the question not too difficult to be solved by mechanical skill. A submarine cable plays unaccountable freaks in running out, according to the weather and other circumstances, and its giant strength requires to be carefully handled. By one of these strange whims, just when all was going smoothly, the African cable, suddenly whipping out of the bights, damaged the machinery in the hold. The cable fouled but did not kink, and whirling at random, carried away the upper tier of rings, went flying through the hatchway, tore every thing away, so that there was a perfect hurricane of fragments of iron and timber scattered in all directions, not without some marvelous escapes. The men in the hold, inured to the risks of cable-laying by former practice in the Black Sea, kept clear of the wreck, but stood firmly to their posts:

At the lever-brake all was jammed hard down in an instant; putting, it appeared by the indicator, at least seven and a half tons' strain on the cable, which stood this immense strain without breaking, as many on board thought inevitable. It stopped the run of the cable, though with very considerable loss, the depth of water being so great. The cable was, however, saved; and in less than an hour, all being made right, there was a fresh start. Experience had been gained which served good purpose. At the time the accident occurred the ship's speed was five and a half to six knots, while the cable, with even five tons' strain on it, ran out at eight; so great was the depth of water. At this rate it would never have reached the land; but now weight after weight was boldly added till the strain was increased to six or six and a half tons per mile, the ship being kept to her former speed; and thus the waste of the back-slip was effectually prevented for the future.

An hour or two after noon, the land of Sardinia was sighted about fifty miles ahead, all going right. Thus the squadron carried on till sunset, when it was within ten or twelve miles of the coast of Sardinia, the course being steered for Cape Teulada, the southernmost point of the island, about seven leagues eastward of Cape Spartivento. Here the Elba lay to for the night, a kedge being carried out and dropped in eighty fathoms of water, by which and the cable she held on. The frigate towing east off the hawsers, and the other ships closing in, the squadron came to anchor. It was a charming evening, the sun setting in a flood of glory, reflected as in a mirror on the placid surface of the Mediterranean, and bringing out in strong relief the bold promontories and rocky islets of the Sardinian coast. After a while lights gleamed cheerfully from the cabin-windows of the squadron grouped around, and soon all was still as the sleeping waters, and every one sought the rest that was needed.

Next morning, the bearings of the position having been carefully taken, and a piece of the Malta cable, with another smaller coil, being spliced on, as the African cable was now expended, the paying out again commenced; Cape Teulada, for which the course was laid, being, as already mentioned, from eleven to twelve miles distant. All went right, and ten miles of cable were run out without any loss. And

now, as the vessel drew nearer and nearer the land, some on board not engaged in the operations, intense as was the interest with which they were watched, turned from counting the rapidly decreasing coils to mark the outlines of shores with the main features of which they were already familiar. On either hand projected the bold and lofty promontories of Teulada and Spartivento, commanding the entrances of the noble Gulfs of Palmas on the one side, and Cagliari on the other, the coast between them being formed by long lines of precipitous cliffs. Far away to the northward, the faint outline of the central chain of Sardinian mountains was presented to the eye in aerial tints; while to the eastward, the islands of San Pietro and San Antiocho, with some rocky islets, rose apparently right out of the sea to great elevations. The whole of this coast of a fertile island, rich in various natural products, but whose resources are undeveloped, has a barren and desolate aspect. Not a fisherman's skiff was seen skirting the shore; not a sail on the Mediterranean plowing the way to the entrances of two of the finest harbors it offers in all its vast outline.

The smaller coil of cable was now running out, being handled with great care—the more as the preceding night's calm had been succeeded by a stiff breeze from the south-east, and the sea had become rough. But in spite of all precautions, when within a mile and three quarters of the shore, a sudden gust of wind having canted the Elba's stern round, the cable broke. This happening in 'only forty fathoms water, with a sandy bottom, and so near the shore, there could be no difficulty in picking up the cable's end, and connecting it with a short length reaching to the land. But from the state of the weather, and other circumstances, it was thought advisable to defer the operation till a fresh piece of cable was procured from England. Telegraphic communication between the continent of Europe and Algeria was therefore deferred for a few weeks, at the expiration of which its last link was supplied. The bearings of the position were accurately taken when the cable parted, so that it was grappled at the first haul on the operations being resumed; but the real difficulties of the undertaking had been surmounted when the cable was laid in the depths of the Mediterranean.

After completing the African line, the

cables between Cagliari and Malta, and from Malta to Corfu, were immediately laid; the whole operations being accomplished before the end of December with entire success, though there was a heavy sea in the Malta channel while the last cable was paid out. Much very deep water was passed on the Malta and Corfu line, the depth between Cape Passaro, the south-eastern point of Sicily and Corfu, varying from 500 to 1400 fathoms. In one place the line approached soundings of 1800, and they were seldom less than 500, fathoms. In the line from Cagliari to Malta, and from that island to Cape Passaro, the water is much shoaler, the greater part of the line being laid in less than 300 fathoms. For a short length the depth reached 1000 fathoms. It appears from the soundings made during these operations, that the whole bottom of the Mediterranean, in the lines traversed, is composed of fine sand, such samples being brought up from the greatest depths; an important fact as regards the duration of the cables, since, when once laid in such bottoms, it is difficult to conceive what can injure them. In the shoal water, where the bottom was found in general to be sand and shells, there can be no great difficulty in picking up the cables, and repairing any damage they may receive. The direct length of the Cagliari and Malta line is 375 nautical miles; that of the Malta and Corfu, 420; the average waste having not exceeded from twenty to twenty-two per cent. The ship's speed averaged about five knots per hour.

The objects for which the united squadron assembled on the coast of Algeria having been so far accomplished, it parted off Cape Teulada, the writer being courteously afforded a passage on board the Sardinian frigate to Cagliari, and afterwards to Genoa. He found on board General Alberto della Marmora, whose Topographical Survey and other works on Sardinia are well known. The General has long devoted himself with indefatigable zeal, not only to the physical description, but to the promotion of the social and material interests, of the island of Sardinia, and this led him, though in advanced years and feeble health, to undertake the voyage for the purpose of witnessing an operation to the combination of which, with other projects, he attached considerable importance.

Cagliari, a fine city occupying a com-

manding position, has acquired some notoriety from its having been for a time the first telegraph station reached from India. During the writer's stay there, he was standing in the balcony of our excellent Consul-General's house late one evening, when the lights of a steamboat from Malta were seen in the gulf, and he witnessed the anxiety with which an important telegram, in the very crisis of Indian affairs, was transmitted to London. Since the line has been extended to Malta, the station at Cagliari has lost its importance as regards Indian news. But General della Marmora prognosticates that, from its central position in the great highway to the east, from its noble harbor, and the abundant resources of the fertile island of which it is the capital and principal seaport, Cagliari will not only rival the barren rock of Malta as a place for telegraphic communications to ports in northern and western oceans, but will draw to itself a share of the commercial enterprise which is now enlarging its bounds; especially as an *entrepôt* for the corn-trade of the Black Sea.

It having been now shown how far and to what points the electric wires have been successfully laid in the western basin of the Mediterranean, let us in conclusion just glance at their probable extension eastward by submarine cables. The natural point from which further progress should be made towards telegraphic communication with India, would seem to be Malta. But though the importance of having the line as far as possible under the control of British authorities is unquestionable, and we should even like to see Gibraltar made the first Mediterranean station, the plan of continuing the present line from Malta to Alexandria by a submarine cable does not appear to have received much favor. Whether the depth of water in that part of the eastern basin of the Mediterranean be an obstacle to the undertaking, we have not before us at present sufficient data to determine; it can hardly be insurmountable. But the project most likely to be immediately accomplished, consists of a submarine cable from Ragusa to Alexandria, in connection with the Austrian continental lines. Though open to objections on political grounds, it is a very feasible plan, and the preliminary measures for carrying it out are said to be complete.

Passing over other projects afloat for

Mediterranean lines of submarine telegraphs, we will only remark, that since Captain Pullen's recent report on the soundings in the Red Sea, there can be no reason to doubt that those who successfully laid submarine cables in the great depths of the Mediterranean, will easily accomplish the operation in the Red Sea, and continue the line in the Indian Ocean, so as to perfect telegraph communication with India. Nor, from private information on which we can rely, have we much apprehension of failure in the speedy establishment and subsequent maintenance of the overland line of telegraph wires from Constantinople, by Bagdad and Bussorah, to the Persian Gulf, undertaken by the Turkish Government. Thus the great desideratum of a double line of telegraphs to India bids fair of being attained, and that speedily; it being calculated that all the operations connected with both of what may be called the Indian lines can be completed

in the course of two years. Should the Transatlantic line be safely laid, as, after the experience gained by successes as well as by failures, may be fairly expected, there will then be direct telegraphic communication between Calcutta and New-York, more than one third of the circumference of the globe being encircled by a magic ring, the medium of conveying winged words with the rapidity of thought and the lightning's flash. Additional Transatlantic and other lines must necessarily be struck out in the course of things; and with the experience now gained of the practicability of laying submarine conductors of the electric current, and with the growing demands for rapid international communication, it is difficult to conceive any limits to its extension, until *there be no speech nor language where its voice is not heard; their "lines" being gone out into all lands, and their words unto the end of the world.*

From the Westminster Review.

RECENT ASTRONOMY AND THE NEBULAR HYPOTHESIS.

(CONCLUDED FROM LAST NUMBER, PAGE 87.)

[Saturn's Rings—Densities of Sun and Planets—The Earth once liquid—An exploded Planet—Temperatures of the Sun and Planets—Hurricanes in the Sun.]

THE most significant fact of all, however, is that presented by the rings of Saturn. As Laplace remarks, they are, as it were, still extant witnesses of the genetic process he propounded. Here we have, continuing permanently, forms of matter like those through which each planet and satellite once passed; and their movements are just what, in conformity with the hypothesis, they should be. "La durée de la rotation d'une planète doit donc être, d'après cette hypothèse, plus petite que la durée de la révolution du corps le plus voisin qui circule autour d'elle," says Laplace. And he then points out that the time of Saturn's

rotations is to that of his rings as 427 to 438—an amount of difference such as was to be expected. But besides the existence of these rings, and their movement in the required manner, there is a highly suggestive circumstance which Laplace has not remarked—namely, the place of their occurrence. If the solar system was produced after the manner popularly supposed, then there is no reason why the rings of Saturn should not have encircled him at a comparatively great distance. Or, instead of being given to Saturn, who in their absence would still have had eight satellites, such rings might have been given to Mars, by way of compensation for a

moon. Or they might have been given to Uranus, who, for purposes of illumination, has far greater need of them. On the common hypothesis, we repeat, no reason can be assigned for their existence in the place where we find them. But on the hypothesis of evolution, the arrangement, so far from offering a difficulty, offers another confirmation. These rings are found where alone they could have been produced—close to the body of a planet whose centrifugal force bears a great proportion to his gravitative force. That permanent rings should exist at any great distance from a planet's body, is, on the nebular hypothesis, manifestly impossible. Rings detached early in the process of concentration, and therefore consisting of gaseous matter having extremely little power of cohesion, can have no ability to resist the disrupting forces due to imperfect homogeneity, and must, therefore collapse into satellites. A liquid ring is the only one admitting of permanence. But a liquid ring can be produced only when the aggregation is approaching its extreme—only when gaseous matter is passing into liquid, and the mass is about to assume the planetary form. And even then it can not be produced save under special conditions. Gaining a rapidly increasing preponderance, as the gravitative force does during the closing stages of concentration, the centrifugal force can not in ordinary cases cause the detachment of rings when the mass has become very dense. Only where the centrifugal force has all along been very great, and remains powerful to the last, as in Saturn, can liquid rings be formed.

Thus the nebular hypothesis shows us why such appendages surround Saturn, but exist no where else. And then, to

crown all, let us not forget the fact, discovered within these few years, that Saturn possesses a nebulous ring, through which his body is seen as through a thick veil. In a position where alone such a thing seems preservable—suspended, as it were, between the denser rings and the planet—there still continues one of these annual masses of diffused matter from which satellites and planets are believed to have originated.

We find, then, that besides those most conspicuous peculiarities of the solar system which first suggested the theory of its evolution, there are many minor ones clearly pointing in the same direction. Were there no other evidence, these mechanical arrangements would, considered in their totality, go far to establish the nebular hypothesis. From the mechanical arrangements of the solar system, turn we now to its physical characters; and, first, let us consider the inferences deducible from relative specific gravities.

The fact that, speaking generally, the denser planets are the nearer to the Sun, has been by some considered as adding another to the many indications of nebular origin. Legitimately assuming that the outermost parts of a rotating nebulous spheroid, in its earlier stages of concentration, will be comparatively rare; and that the increasing density which the whole mass acquires as it contracts, must hold of the outermost parts as well as the rest; it is argued that the rings successively detached will be more and more dense, and will form planets of higher and higher specific gravities. That this may be, and perhaps is, one element in the explanation, we admit; but, taken alone, it is quite inadequate to account for the facts. Using the Earth as the standard of comparison, the relative densities run thus:

Neptune.	Uranus.	Saturn.	Jupiter.	Mars.	Earth.	Venus.	Mercury.	Sun.
0.14	0.24	0.14	0.24	0.95	1.00	0.92	1.12	0.24

Two seemingly insurmountable objections are presented by this series. The first is, that the progression is but a broken one. Neptune is as dense as Saturn, which, by the hypothesis, it ought not to be. Uranus is as dense as Jupiter, which it ought not to be. Uranus is denser than Saturn, and the Earth is denser than Venus—facts which not only give no countenance to, but directly contradict, the alleged explanation. The second objec-

tion, still more manifestly fatal, is the low specific gravity of the Sun. If, when the matter of the Sun filled the orbit of Mercury, its state of aggregation was such that the detached ring formed a planet having a specific gravity equal to that of iron; then the Sun itself, now that it has concentrated, should have a specific gravity much greater than that of iron; whereas its specific gravity is not much above that of water. Instead of being far denser

than the nearest planet, it is not one fourth as dense. And a parallel relation holds between Jupiter and his smallest satellite.

While these anomalies render untenable the position that the relative specific gravities of the planets are direct indications of nebular condensation, it by no means follows that they negative it. On the contrary, we believe that the facts admit of an interpretation perfectly consistent with the hypothesis of Laplace; nay, more—that this hypothesis gives us a key to the irregularities.

There are three conceivable causes of unlike specific gravities in the members of our solar system: 1. Difference in the nature of the matter or matters composing them. 2. Difference in the quantities of matter; for, other things equal, the mutual gravitation of atoms will make a large mass denser than a small one. 3. Difference in their structures, as being either solid or liquid throughout, or as having central cavities filled with elastic æriform fluid. Of these three conceivable causes, that commonly assigned is the first, more or less modified by the second. The extremely low specific gravity of Saturn, which but little exceeds that of cork—and, on this hypothesis, must at his surface be considerably less than that of cork—is supposed to arise from the intrinsic lightness of his substance. That the Sun weighs not much more than an equal bulk of water, is taken as evidence that the matter he consists of is but little heavier than water; although, considering his enormous gravitative force, which at his surface is twenty-eight times the gravitative force at the surface of the Earth, and considering his enormous mass, which is 390,000 times that of the Earth, the matter he is made of can have no analogy to the fluids or solids we know. However, spite of these difficulties, the current hypothesis is, that the Sun and planets, inclusive of the Earth, are masses either solid or liquid, or having solid crusts with liquid nuclei: their unlike specific gravities resulting from unlikenesses of substance. And indeed, at first sight, this would seem to be the only tenable supposition; seeing that, unless prevented by some immense resisting force, gravitation must obliterate any internal cavity by collapsing the surrounding fluid or solid matter.

Nevertheless, that the Earth, in com-

mon with other members of the solar system, consists of a solid shell whose cavity is entirely filled with molten matter, is not an established fact; it is nothing but a supposition. We must not let its familiarity and apparent feasibility delude us into an uncritical acceptance of it. If we find an alternative supposition which, physically considered, is equally possible, and which is also the one indicated by the nebular hypothesis, we are bound to consider it. And if it not only avoids the difficulties above pointed out, but many others hereafter to be mentioned, while it explains anomalies otherwise unaccountable, we must give it the preference.

Before proceeding to consider what the nebular hypothesis indicates respecting the internal structure of the Sun and planets, we may state that our reasonings, though of a kind not admitting of direct verification, are nothing more than deductions from the established principles of physics. We have submitted them to an authority than whom we believe none is higher; and while not prepared fully to commit himself to them, he yet sees nothing to object.

Starting, then, with a rotating spheroid of æriform matter, in the latter stages of its concentration, but before it has begun to take a liquid or solid form, let us inquire what must be the actions going on in it. Mutual gravitation continually aggregates its atoms into a smaller and denser mass; and the aggregating force goes on increasing, as the common center of gravity is approached. An obstacle to concentration, however, exists in the centrifugal force, which, at this stage, bears a far higher ratio to gravity than afterwards, and in a gaseous spheroid must produce a very oblate form. At the same time, the approximation of the atoms is resisted by a force which, in being overcome, is evolved as heat. This heat must be greatest where the atoms are subject to the highest pressure—namely, about the central parts. And as fast as it escapes into space, further approximation and further generation of heat must take place. But in a gaseous spheroid, whose internal parts are hotter than its external ones, there must be some circulation taking place. The currents must set from the hottest region to the coolest by some particular route; and from the coolest to the hottest by some other route. In a very oblate spheroid, the coolest region must be that

about the equator; the surface there bearing so large a ratio to the mass. Hence there will be currents from the center to the equator, and others from the equator to the center. What will be the special courses of these currents? From the center they will follow the lines of most rapidly-decreasing density; seeing that the inertia will be least in those directions. That is to say, there will be a current from the center towards each pole, along the axis of rotation; and the space thus continually left vacant will be filled by the collapse of matter coming in at right angles to the axis. The process can not end here, however. If there are constant currents from the center towards the poles, there must be a constant accumulation at the poles: the spheroid will be ever becoming more protuberant about the poles than the conditions of mechanical equilibrium permit. If, however, the mass at the poles is thus ever in excess, it must, by the forces acting upon it, be constantly moved over the outer surface of the spheroid from the poles towards the equator: thus only can that form which rotation necessitates be maintained. And a further result of this transfer of matter from the center, by way of the poles, to the equator, must be the establishment of counter-currents from the equator in diametrical lines, to the center.

Mark now the changes of temperature that must occur in these currents. An aëriform mass ascending from the center towards either pole, will expand as it approaches the surface, in consequence of the diminution of pressure. But expansion, involving an absorption of heat, will entail a diminished temperature; and the temperature will be further lowered by the greater freedom of radiation into space. This rarefied and cooled mass must be still more rarefied and cooled in its progress over the surface of the spheroid to the equator. Continually thrust further from the pole by the ceaseless accumulation there, it must acquire an ever-increasing rotatory motion and an ever-increasing centrifugal force; whence must follow expansion and absorption of heat. To the refrigeration thus caused must be added that resulting from radiation, which at each advance towards the equator will be less hindered. And when the equator is arrived at, the mass we have thus followed will have reached its max-

imum rarity and maximum coolness. Conversely, every portion of a current proceeding in a diametrical direction from the equator to the center, must progressively rise in temperature; in virtue alike of the increasing pressure, the gradual arrest of motion, and the diminished rate of radiation. Note, lastly, that this circulation will go on with extreme slowness. As the matter proceeding from the equator towards the center must have its rotatory motion destroyed in the process, while that proceeding from the poles to the equator must have motion given to it, it follows that an enormous amount of inertia has to be overcome; and this must make the currents so slow as to prevent them from producing any thing like an equalization of temperature.

And now, such being the constitution of a concentrating spheroid of gaseous matter, where will it begin to condense into liquid? The common assumption has been, that in a nebulous mass approaching towards the planetary form, the liquefaction will first occur at the center. We believe that, on examination, this assumption will prove to be inconsistent with established physical principles.

THE EARTH, ONCE LIQUID.

Observe first that it is contrary to analogy. It is admitted on all hands that the matter of the Earth was liquid before any of it became solid. Where has it first solidified? Not at the center, but at the surface. Now the same general principles apply to the condensation of gaseous matter into liquid, which apply to the condensation of liquid matter into solid. Hence if the once liquid substance of the earth first solidified at the surface, the implication is that its once aëriform substance first liquefied at the surface.

But we have no need to rest in analogy. On considering what must happen in a rotating nebulous spheroid having currents moving as we have shown they must move, we shall see that external condensation is a corollary. In conformity with reasonings and facts already given, the presumption is that a nebulous mass, when it has arrived at this stage, will consist of an aëriform mixture of various matters; the heavier and more condensible matters being contained in the rarer or less condensible ones, in the same way that water is contained in air. And the inference

must be, that at a certain stage some of these denser matters will be precipitated in the shape of vapor.* Now, what are the laws of precipitation from gases? If a gas, holding some substance in suspension, expands in consequence of the removal of pressure, it will, when the rarefaction and consequent cooling reach a certain point, begin to let fall the suspended substance. Conversely, if a gas, saturated even with some substance, is subject to increased pressure, and is allowed to retain the additional heat which that pressure generates, so far from letting fall what it contains, it will gain the power to take up more. See, then, the inference respecting condensation in a nebulous spheroid. The currents proceeding from the equator to the center, subject to increasing pressure, and acquiring the heat due not only to this increasing pressure but to arrested motion, will have no tendency to deposit their suspended substances, but rather the reverse: the formation of liquid matter at the center of the mass will be impossible. Contrariwise, the currents moving from the center to the poles and thence to the equator, expanding as they go, first from diminished pressure and afterwards from increased centrifugal force; and losing heat, not only by expansion, but by more rapid radiation; will have less and less power to retain their contained matter. The earliest precipitation will therefore take place in the region of extremest rarefaction; namely, about the equator. An equatorial belt of vapor will be first formed, and, widening into a zone, will by and by begin to condense into fluid.† Gradually this fluid film will extend itself on each side the equator, and, encroaching upon the two hemispheres, will eventually close over at the poles: thus forming a thin hollow globe, or rather spheroid, filled with gaseous matter. We do not mean that this condensation will take place at the very outermost surface; for probably round the denser gases forming the principal mass, there will extend strata of gases too rare to be entangled in these processes. It is the surface of this inner spheroid of denser gases to which our rea-

soning points as the place of earliest condensation.

The internal circulation we have described, continuing, as it must, after the formation of this liquid film, there will still go on the radiation of heat, and the progressive aggregation. The film will thicken at the expense of the internal gaseous substances precipitated upon it. As it thickens, as the globe contracts, and as the gravitative force augments, the pressure will increase; and the evolution and radiation of heat will go on more rapidly. Eventually, however, when the liquid shell becomes very thick, and the internal cavity relatively small, the obstacle put to the escape of heat by this thick liquid shell, with its slowly circulating currents, will turn the scale; the temperature of the outer surface will begin to diminish, and a solid crust will form while the internal cavity is yet unobliterated.

"But what," it may be asked, "will become of this gaseous nucleus when exposed to the enormous gravitative pressure of a shell some thousands of miles thick? How can æriform matter withstand such a pressure?" Very readily. It has been proved that even when the heat generated by their compression is allowed to escape, some gases remain uncondensable by any force we can produce. An unsuccessful attempt lately made at Vienna to liquefy oxygen, clearly shows this enormous resistance. The steel piston employed was literally shortened by the pressure used; and yet the gas remained unliquefied! If, then, the expansive force is thus immense when the heat evolved is dissipated, what must it be when that heat is detained, as in the case we are considering? In such a case, every addition to the heat is an addition to the repulsive power of the atoms; the increased pressure itself generates an increased ability to resist; and this remains true to whatever extent the compression is carried. Indeed, it is an obvious corollary from the law of the conservation of force, that if, under increasing pressure, a gas retains the accumulating heat evolved, its resisting force is *absolutely unlimited*. Hence, the internal planetary structure we have described is as physically stable a one as that commonly assumed.

And now let us see how this hypothesis tallies with the facts. One inference from it must be, that large masses will progress towards final consolidation more slowly

* The reader will perhaps say that this process is the one described as having taken place early in the history of nebular evolution; and this is true. But the same actions will be repeated in media of different densities.

† The formation of Saturn's rings is thus rendered quite comprehensible.

than small masses. Though a large concentrating spheroid will, from its superior aggregative force, generate heat more rapidly than a small one; yet, having relatively to its surface, a much greater quantity of heat to get rid of, it will be longer than a small one in going through the changes we have described. Hence, at a time when the smaller members of our solar system have arrived at so advanced a stage of aggregation as almost to have obliterated their central cavities, and so reached high specific gravity, the larger members will still be in that comparatively early stage in which the central cavity bears a great ratio to the surrounding shell, and will therefore have low specific gravities. This contrast is just what we find. The small planets, Mercury, Venus, the Earth, and Mars, differing from each other comparatively little in density as in size, are about four times as dense as Jupiter and Uranus, and seven times as dense as Saturn and Neptune—planets exceeding them in size as oranges exceed peas; add to which, that they are four times as dense as the Sun, which in mass exceeds the smallest of them nearly 5,000,000 times. The objection which will at once occur to some, that this hypothesis does not explain the minor differences, serves but to introduce a further confirmation. It may be urged that Jupiter is of greater specific gravity than Saturn, though, considering his superior mass, his specific gravity should be less; and that still more anomalous is the case of the Sun, which, though containing a thousand times the matter that Jupiter does, is nearly of the same specific gravity. The solution of these difficulties lies in the modifying effects of centrifugal force. Had the various masses to be compared been all along in a state of rest, then the larger should have been uniformly the less dense. But during the concentrating process they have been rotating with various velocities. The consequent centrifugal force has in each case been in antagonism with gravitation; and, according to its amount, has hindered the concentration to a greater or less degree. The really effective aggregative force which has determined the rate of evolution and radiation of heat, has in each case been the excess of the centripetal tendency over the centrifugal. Whence we may infer that wherever this excess has been the least, the consolidation must have been

the most hindered, and the specific gravity will be the smallest. This, too, we find to be the fact. Saturn, at whose equator the centrifugal force is even now almost one sixth of gravity, and who, by the great number of his satellites, shows us how strong an antagonist to concentration it was in earlier stages of his evolution, is little more than half as dense as Jupiter, whose concentration has been hindered by a centrifugal force bearing a much smaller ratio to the centripetal. On the other hand, the Sun, whose latter stages of aggregation have met with comparatively little of this opposition, and whose atoms tend towards their common center with a force ten times as great as that which Jupiter's atoms are subject to, has, notwithstanding his immense bulk, reached a specific gravity as great as that of Jupiter; and he has done this partly for the reason assigned, and partly because the process of consolidation has been and still is actively going on, while that of Jupiter has long since almost ceased.

Before pointing out further harmonies let us meet an objection. Laplace, taking for data Jupiter's mass, diameter, and rate of rotation, calculated the degree of compression at the poles which his centrifugal force should produce, supposing his substance was homogeneous; and finding that the calculated amount of oblateness was greater than the actual amount, inferred that his substance must be denser towards the center. The inference seems unavoidable; is diametrically opposed to the hypothesis of a shell of a denser matter with a gaseous nucleus; and we confess that on first meeting with this fact we were inclined to think it fatal. But there is a consideration, apt at first to be overlooked, which completely disposes of it. A compressed elastic medium tends ever with great energy to give a spherical figure to the chamber in which it is confined. This is a fact alike mathematically demonstrable, and recognized in practice by every engineer. In the case before us, the expansive power of the gaseous nucleus is such as to balance the gravitation of the shell of the planet; and this power perpetually strives to make the planet a perfect sphere. Thus the centrifugal force is opposed not only by that of gravity but by another of great intensity; and hence the degree of oblateness assumed is relatively small.

AN EXPLODED PLANET.

This difficulty being, as we think, satisfactorily met, we go on to name some indirect but highly significant facts bearing upon our hypothesis. And first with respect to the asteroids, or planetoids, as they are otherwise called. Not that these have proved to be so numerous—now that it has become probable that beyond some fifty already discovered there are many more—the supposition of Olbers that they are the fragments of an exploded planet which once occupied the vacant region they fill, has gained increased probability. The alternative supposition of Laplace, that they are the products of a nebulous ring which separated into many fragments instead of collapsing into a single mass, seems inconsistent with the extremely various, and in some cases extremely great, inclinations of their orbits; as well as with their similarly various and great eccentricities. For these the theory of Olbers completely accounts—indeed, it necessarily involves them; while at the same time it affords us a feasible explanation of meteors, and especially the periodic swarms of them, which would else be inexplicable. The fact, inferred from the present derangement of their orbits, that if the planetoids once formed parts of one mass, it must have exploded myriads of years ago, is no difficulty, but rather the reverse. Taking Olbers' supposition, then, as the most tenable one, let us ask how such an explosion could have occurred. If planets are internally constituted as is commonly assumed, no conceivable cause of it can be named. A solid mass may crack and fly to pieces, but it can not violently explode. So, too, with a liquid mass covered by a crust. Though, if contained in an unyielding shell and artificially raised to a very high temperature, a liquid may so expand as to burst the shell and simultaneously flash into vapor; yet if contained in a yielding crust, like that of a planet, it would not do so, even were the requisite increase of temperature given: it would crack the crust, and give off its expansive force gradually. But the planetary structure above supposed, supplies us with all the requisite conditions to an explosion, and an adequate cause for it. We have in the interior of the mass a cavity serving as a sufficient reservoir of force. We have this cavity filled with gaseous mat-

ters of high tension. We have in the chemical affinities of these matters a source of enormous expansive power capable of being quite suddenly brought into existence. And we have in the increasing heat of the shell, consequent upon progressing concentration, a cause of such instantaneous chemical change and the resulting explosion. The explanation thus supplied, of an event which there can be little doubt has occurred, and which is not otherwise accounted for, adds to the probability of the hypothesis.

One further evidence, and that not the least important, is deducible from geology. From the known rate at which the temperature rises as we pierce deeper into the substance of the Earth, it has been inferred that its solid crust is some forty miles thick. And if this be its thickness, we have a feasible explanation of volcanic phenomena, and of the elevation of mountain chains, etc. But proceeding upon the current supposition that the Earth's interior is wholly filled with molten matter, Professor Hopkins has calculated that to cause the observed amount of precession of the equinoxes, the Earth's crust must be at least eight hundred miles thick. Here is an immense discrepancy. However imperfect may be the data from which it is calculated that the Earth is molten at forty miles deep, it seems very unlikely that this conclusion differs from the truth so widely as forty miles does from eight hundred. It seems scarcely conceivable that if the crust is thus thick, it should, by its contraction and corrugation, produce mountain chains, as it has done during quite modern geological epochs. It is not easy on this supposition to explain elevations and subsidences of small area. Neither do the phenomena of volcanoes appear comprehensible: indeed, to account for these, Professor Hopkins has been obliged to make the gratuitous and extremely improbable assumption, that there are isolated lakes of molten matter inclosed in this thick crust, and situated, as they must be, not far from its outer surface. But irreconcilable as appear the astronomical with the geological facts, if we take for granted that the Earth consists wholly of solid and liquid substances, they become at once reconcilable if we adopt the conclusion that the Earth has a gaseous nucleus. If there be an internal cavity of considerable diameter occupied only by æriform mat-

ter—if the density of the surrounding shell is, as it must in that case be, greater than the current supposition implies; then there will be a larger quantity of matter contained in the equatorial protuberance, and an adequate cause for the precession. Manifestly there may be found some proportion between the central space and its envelope, which will satisfy the mechanical requirements without involving a thicker crust than geological phenomena indicate.

We conceive then that the hypothesis we have set forth, is in many respects preferable to that ordinarily received. We can know nothing by direct observation concerning the central parts either of our own planet or any other: indirect methods are alone possible. The idea which has been tacitly adopted is just as speculative as that we have opposed to it; and the only question is, Which harmonizes best with established facts. Thus compared, the advantage is greatly on the side of the new one. It disposes of sundry anomalies, and explains things that seem else incomprehensible. We are no longer obliged to assume such wide differences in the substances of the various planets: we need not think of any of them as like cork or water. We are shown how it happens that the larger planets have so much lower specific gravities than the smaller, instead of having higher ones, as might naturally have been expected; and we are further shown why Saturn is the lightest of all. That Mercury should be relatively so much heavier than the Sun; that Jupiter should be specifically lighter than his smallest satellite; that Saturn's rings should be more than half as dense again as himself; are no longer mysteries. A feasible cause is assigned for the catastrophe which produced the asteroids. And some apparently incongruous peculiarities in the Earth's structure are brought to an agreement. May we not say, then, that being deducible by strict reasoning from the nebular hypothesis, this alleged planetary structure gives further indirect support to that hypothesis?

In considering the specific gravities of the heavenly bodies, we have been obliged to speak of the heat evolved by them. But we have yet to point out the fact that in their present conditions with respect to temperature, we find additional materials for building up our argument;

and these too of the most substantial character.

It is an inevitable deduction from established physical principles, that heat must be generated by the aggregation of diffused matter into a concrete form; and throughout our reasonings we have assumed that such generation of heat has been an accompaniment of nebular condensation. If then the nebular hypothesis be true, we ought to find in all the heavenly bodies either present high temperature, or marks of past high temperature.

As far as observation can reach, the facts prove to be exactly what theory requires. Various orders of evidence conspire to demonstrate that, below a certain depth, the Earth is still molten. And that it was once wholly molten, is implied by the circumstance that the rate at which the temperature increases as we descend below its surface, is just that which would be found in a mass that had been cooling for an indefinite period. The Moon, too, shows us, by its corrugations and its conspicuous volcanoes, that in it there has been a process of refrigeration and contraction like that which had gone on in the Earth. And in Venus, the existence of mountains similarly indicates an igneous reaction of the interior upon a solidifying crust.

On the common theory of creation, these phenomena are inexplicable. To what end the Earth should have existed for myriads of years at a white-heat, incapable of supporting not only human life, but any life, it can not say. To satisfy this supposition, the Earth should have been originally created in a state fit for the assumed purpose of creation; and similarly with the other planets. While, therefore, to the nebular hypothesis the evidence of original incandescence and still continued internal heat furnish strong confirmation, they are, to the antagonist hypothesis, insurmountable difficulties.

TEMPERATURES OF THE SUN AND PLANETS.

But the argument from temperature does not end here. There remains to be noticed a still more conspicuous and still more significant fact. If the Solar System resulted from the concentration of diffused matter which evolved heat while gravitating into its present dense form, then there are certain obvious corollaries respecting the relative temperatures of the

resulting bodies. Other things equal, the latest-formed mass will be the latest in cooling—will, for an almost infinite time, possess a greater heat than the earlier formed ones. Other things equal, the largest mass will, in virtue of its superior aggregative force, become hotter than the others, and radiate more intensely. Other things equal, the largest mass, notwithstanding the higher temperature it reaches, will, in consequence of its relatively small surface, be the slowest in parting with its evolved heat. And hence, if there is one mass which was not only formed after the rest, but exceeds them enormously in size, it follows that this one will reach an intensity of incandescence much beyond that reached by the rest, and will continue in this state of intense incandescence long after the rest have cooled. Such a mass we have in the Sun. It is a corollary from the nebular hypothesis, that the matter forming the Sun assumed its present concrete form at a period much more recent than that at which the planets became definite bodies. The quantity of matter contained in the Sun is nearly five million times that contained in the smallest planet, and above a thousand times that contained in the largest. And while, from the enormous gravitative force of the atoms, the evolution of heat has been intense, the facilities of radiation have been relatively small. Hence the still-continued high temperature. Just that condition of the central body which is a necessary inference from the nebular hypothesis, we find actually existing in the Sun.

We are aware that in arguing thus we are ignoring the generally received theory respecting the Sun's constitution. Partly with the view of explaining the solar spots, partly, perhaps, from the wish to regard the Sun as habitable, and partly, also, from the difficulty of accounting for a perennial supply of light and heat, certain assumptions have been made respecting the nature of the Sun's surface which, in the absence of antagonism, have gained wide acceptance. We believe it may be shown, however, that these assumptions are illegitimate; that they do not account for the appearances; and that the appearances may be satisfactorily accounted for in a much simpler manner, and without making gratuitous suppositions.

Had space permitted, we should first have stated and criticised the view commonly held; but, as it is, we must con-

tent ourselves with explaining the alternative view, and this with greater brevity than is required to do justice to it.

We shall assume, then, that the Sun is, as it appears, incandescent. We shall further assume that the incandescence is of the kind implied not only by the nebular hypothesis, but by the known habitudes of matter when exposed to extreme heat—namely, the incandescence of molten substances. Round this globe of incandescent molten substances, thus conceived to form the visible body of the Sun, there is known to exist a voluminous atmosphere: the inferior brilliancy of the Sun's border, and the appearances during a total eclipse, alike show this.* What now must be the constitution of this atmosphere? At a temperature approaching a thousand times that of molten iron, which is the calculated temperature of the solar surface, very many, if not all of the substances we know as solid would become gaseous; and though the Sun's enormous attractive force must be a powerful check upon this tendency to assume the form of vapor, yet it can not be questioned, that if the body of the Sun consists of molten substances, some of them must be constantly undergoing evaporation. That the dense gases thus continually being generated will form the entire mass of the solar atmosphere is not probable. If any thing is to be inferred, either from the nebular hypothesis, or from the analogies supplied by the planets, it must be concluded that the outermost part of the solar atmosphere consists of what are called permanent gases—gases that are not condensable into fluid even at low temperatures. If we consider what must have been the state of things here when the surface of the Earth was molten, we shall see that round the still molten surface of the Sun there probably exists a stratum of dense æriform matter, made up of sublimed metals and metallic compounds, and above this a stratum of comparatively rare medium analogous to air. What now will happen with these two strata? Did they both consist of permanent gases, they could not remain separate; according to a well-known law, they would eventually form a homogeneous mixture. But this will by no means happen when the lower stratum consists of matters that are gaseous only at excessively high tempera-

* See Herschel's *Outlines of Astronomy*.

tures. Given off from a molten surface, ascending, expanding, and cooling, these will presently reach a limit of elevation above which they can not exist as vapor, but must condense and precipitate. Meanwhile the upper stratum, habitually charged with its quantum of these denser matters, as our air with its quantum of water, and ready to deposit them on any depression of temperature, must be habitually unable to take up any more of the lower stratum; and therefore this lower stratum will remain quite distinct from it. We conclude, then, that there will be two concentric atmospheres having a definite limit of separation. And however problematical this structure may be thought, it is at any rate far less so than that *gratuitously* assumed in the current hypothesis, which involves *five* atmospheric strata.

HURRICANES IN THE SUN.

Now, Sir John Herschel has shown that the disturbances which produce the solar spots, are in sundry respects analogous to the hurricanes of our own tropics. He has further shown that there must be conflicting currents in the solar atmosphere which will produce them as they are produced here. And, adhering as he does to the favorite supposition of a "photosphere," or light-generating envelope at a distance from the Sun's body, he argues that a spot results when the vortex of one of the hurricanes temporarily disperses the "photosphere," and makes visible the dark surface of the Sun.

Accepting the conclusion, for which there is very strong evidence, that hurricanes or cyclones are the active causes of the solar spots, but assuming that the supposed "photosphere" is the actual incandescent body of the Sun, let us ask, what will be the optical appearance resulting from a cyclone? The conflict of aerial currents which occasions one of these enormous whirlwinds necessarily generates a vortex; and on the upper surface of the atmosphere this vortex must show itself as a depression, shaped like a whirlpool in water. One of these cyclones, then, occurring in the dense aerial stratum which we have described as immediately surrounding the Sun's body, will produce a funnel-shaped vortex upon the surface of this dense stratum. It

needs but a moderate knowledge of optics to see that there must result from this an appearance like that of a solar spot. When rays of light passing out of one medium into another, make with the limiting surface a tolerably large angle, some of them are reflected from it, and some of them, going through it, are refracted; but when they strike it at an acute angle, varying according to the medium, they are *all* reflected—no light at all passes through the surface. Now, against the highly inclined side of one of these funnel-shaped vortices, the light radiating from the body of the Sun underneath will strike at a very acute angle, and will not penetrate it; and therefore the central part of the cyclone will appear to us as a black spot. The change from entire reflection of the light, to partial reflection and partial transmission, taking place suddenly at a particular angle, this central black spot will have a perfectly sharp outline. This inference, too, corresponds exactly with observation. The surface of the vortex being smooth in its interior, it follows that light will pass through it more freely close to the central spot than elsewhere; and the fact is, that the part of the penumbra immediately surrounding the central spot is brighter than the rest; while the outer part of the penumbra, answering to the agitated margin of the vortex, is comparatively dark. "But," it may be said, "according to this hypothesis one of these maculæ should be quite circular, whereas they are extremely irregular." Very true: and we may add that their irregularities are of a kind totally inexplicable on the current hypothesis. Here, however, the explanation is easy. These cyclones occurring in the dense lower atmosphere, are seen by us through the rarer upper atmosphere, which is a distorting medium. It is necessarily full of currents of different densities, and covered with waves; and the refractions produced by these irregularities of surface and substance must greatly complicate the appearances. Space permitting, it might be shown that the mottled penumbra, its reëntrant angles, the bridges of light, the lateral repetitions of the spots, etc., are thus fully accounted for, as well as the faculæ and pores. But without going into details, we think we have shown that, assuming the Sun to have that constitution which the nebular hypothesis implies, and taking for granted

nothing beyond the established principles of physics, we are supplied with an explanation of the solar spots, which, to say the least of it, is quite as tenable as the one ordinarily given.

Had there been a few pages to spare, we should here have entered upon yet another class of facts of great significance; but we must forbear. However, we think that, considered in their *ensemble*, the several groups of evidences already assigned are tolerably conclusive. We have seen that, when critically examined, the rash speculations of late years current respecting the nature of the nebulae, commit their promulgators to sundry gross absurdities; while, on the other hand, we see that the various appearances these nebulae present are clearly explicable as different stages in the precipitation and aggregation of diffused matter. We find that comets, alike by their physical constitution, their immensely elongated and variously-directed orbits, the distribution of those orbits, and their manifest structural relation to the solar system, bear testimony to the past existence of that system in a nebulous form. Not only do those obvious peculiarities in the motions of the planets which first suggested the nebular hypothesis supply proofs of it, but on closer examination we discover, in the slightly diverging inclinations of their orbits, in their various rates of rotation, and their differently-directed axes of rotation, that the planets yield us yet further testimony; while the satellites, by sundry traits, and especially by their occurrence in greater or less abundance where the hypothesis implies, confirm this testimony. By carefully tracing out the process of planetary condensation, we are led to conclusions respecting the internal structure of planets which at once explain their anomalous specific gravities, and at the same time reconcile various seemingly contradictory facts. Once more, it turns out that what is *à priori* inferable from the nebular hypothesis respecting the temperatures of the resulting bodies, is just what observation establishes; and

that not only the absolute, but also the relative temperatures of the sun and planets are thus accounted for. When we contemplate these various evidences in their totality—when we observe that, by the nebular hypothesis, all the leading phenomena of the solar system, and the heavens in general, are explicable; and when, on the other hand, we consider that the common cosmogony is not only without a single fact to stand upon, but is at variance with all our positive knowledge of Nature; we see that the proof becomes overwhelming—approaches as near demonstration as indirect proof can do.

It remains only to point out, that while the genesis of the solar system, and of countless other systems like it, is thus rendered comprehensible, the ultimate mystery continues as great as ever. The problem of existence is not solved; it is simply removed further back. The nebular hypothesis throws no light upon the origin of diffused matter; and diffused matter as much needs accounting for as concrete matter. The genesis of an atom is not easier to conceive than the genesis of a planet. Nay, indeed, so far from making the Universe less wonderful than before, it makes it more wonderful. Creation by manufacture is a much lower thing than creation by evolution. A man can put together a machine; but he can not make a machine develop itself. The ingenious artisan, able as some have been, so far to imitate vitality as to produce a mechanical piano-forte-player, may in some sort conceive how, by greater skill, a complete man might be artificially produced; but he is totally unable to conceive how such a complex organism gradually arises out of a minute structureless germ. That our harmonious universe once existed potentially as formless diffused matter, and has slowly grown into its present organized state, is a far more astonishing fact than would have been its formation after the artificial method vulgarly supposed. The nebular hypothesis implies a First Cause as much transcending "the mechanical God of Paley," as this does the fetish of the savage.

From Bentley's Miscellany.

A LADY IN SPITZBERGEN.*

It is not every day that a lady goes to Spitzbergen. A group of islands which extend to within ten degrees of the Pole, are the greater part of the year wrapped in darkness or fog, have only one day of four months, and a summer of a month or six weeks' duration, are not exactly the place for the less hardy sex. It will be necessary, then, to explain, in the words of Madam Léonie d'Aunet, how it was that she came to go to Spitzbergen:

"A few friends were at my house. Among them was M. Gaimard, the celebrated traveler. M. Gaimard has been twice round the world, and has been engaged in I don't know how many expeditions to the Pole; on that day he was relating to us, in his characteristic southern and picturesque style, the shipwreck of the *Uranie*, and he took especial pleasure in dwelling in his narrative upon the evidences of coolness and courage manifested under the circumstances by Madam Freycinet, who accompanied her husband, the commander of the *Uranie*."

"When he had finished, some one said: 'Poor woman, she must have suffered a great deal!'"

"You pity her?" I said; "I—I envy her!"

"M. Gaimard looked at me."

"Are you speaking seriously, madam?"

"Very seriously."

"Would you like to go round the world?"

"That is my dream."

"And do more?"

"I do not understand; I thought M. Gaimard was quizzing me."

"Yes, more," he continued; "many have been round the world, but no one has yet penetrated sufficiently into the Polar regions to determine if one can pass that way from Europe to America."

"Well, you know the way?"

"No, we are going to seek for it; I start three weeks hence, with a scientific commission, of which I am the president, to explore the Arctic Ocean in the neighborhood of Spitzbergen and Greenland."

"How lucky you are!"

"I should be still more so if this expedition would tempt your husband, and if he would give to it the aid of his talent."

"I think such a proposition might be made to him."

"Will you undertake to do it, madam?"

"Yes, on one condition."

"What is that?"

"It is that I shall accompany him."

"To the end?"

"Yes, to the end."

"That will present difficulties, because ladies are not received on board of men-of-war, and——"

"Then I shall not say a word in favor of the journey: on the contrary."

"Well, speak about it, and we will see if the difficulty can be got over."

"The same evening the project was discussed by my husband and myself, and obtained both our consents. The next day we announced our departure to our friends. There was a unanimous outcry against it."

"What madness!" exclaimed one: "you will come back ugly."

"Why so?"

"Horrible climate! and besides, you are too young and too delicate for so fatiguing a journey: at least, wait a little."

"No; in the first place, I might not have another opportunity; then again, at a later period, I may have children, and should no longer have a right to expose my life in adventures."

"At your age," exclaimed another, "people go to balls, and not to the Pole."

"One does not prevent the other; if I come back, I shall have plenty of time to go to balls."

"And if you do not come back?"

"You will have the pleasure of saying: 'Well, I told her so.'"

And so it was that Madam Léonie d'Aunet made up her mind to go to Spitzbergen. The scientific expedition was to go by sea; she and her husband were to join it at Hammerfest. On her way there, her carriage, which was not a Norwegian one, was precipitated into the ravine of the Lougen. In this extremity a young Norwegian officer passed by in his cariole, wrapped up in his water-proof, and smoking a long pipe with amber mouth-piece, on his way to Drontheim. The servant ran up to inform him of the sad accident; the carriage being suspended by the pines half-way down the ravine, its inmates had with difficulty extricated themselves from their dangerous position. Madam d'Au-

* *Voyage d'une Femme au Spitzberg.* Par Mme. LÉONIE D'AUNET.

net had thus reached the top of the precipice. The officer stopped for a moment, listened to the story patiently but coldly, and then whipped his horse, and continued his way, after, Madam d'Aunet relates, "having looked at me with more curiosity than interest. I must have been horrible; my face was swollen by contusions, blanched with fear, and my clothes were crumpled, wet, muddy; altogether, I must have presented *un ensemble peu gracieux*. On me le prouva bien !"

The first of the ill-omened prophecies had already come to pass!

The expedition sailed from Hammerfest on the 17th of July, and gained the open sea, after nearly carrying off the ship's bowsprit by missing stays when on too close a tack, and afterwards nearly smashing the pilot's boat. Our fair traveler excuses herself from saying much concerning the first portion of the journey, for she acknowledges that she found it *à propos d'être très-malade*. But on the fourth day she had so far recovered as to make her appearance on deck, when the corvette was making good way in a heavy sea, but with a favorable breeze. The next day they fetched Cherry Island, but which, she tells us, ought, from its original discoverers, to be called Beeren Eiland, or Bear Island. This island presented in the interior an almost continuous snowy mass, but its outskirts seemed like a place fortified by giants; its formidable rocks, incessantly mined by the waves, having assumed monumental forms, advancing at times in immense arches like antediluvian bridges into the ocean, their parapets enlivened by the presence of an infinite multitude and variety of sea-fowl. A landing was effected, and the geologist discovered fossil corals, while the astronomers determined its geographical position to be in 76 deg. 30 min. north longitude instead of 74 deg. 30 min., as had been before assumed!

The same evening a dense fog came on, and the weather became unfavorable; the sea was very heavy, and the snow accumulated on the decks so as to impede exercise. With some trifling exceptions, this same untoward weather continued for upwards of a fortnight, till at length, on the 30th, they fetched Prince Charles Island, and the next day entered into Magdalena Bay.

"We had then arrived at the end of our long and adventurous voyage: at Spitzbergen!

"Spitzbergen is a country that lies farther to the north than the country of the Samoieds, than Siberia or Nova Zembla; it is an island veritably placed at the confines of the earth; it is a strange place, of which very little is, in truth, known; for when I was in Denmark and Sweden, several persons, hearing that I was going to Spitzberg, asked me if I really intended ascending to the summit. The word Spitzberg, which means pointed mountain, led them into error, and they were thus induced to imitate the monkey of La Fontaine, who mistook the name of a port for that of a man.

"Little as it is known, Spitzbergen has a master; it belongs to the Emperor of Russia, who has not yet made use of it as a place of relief to Siberia. Such an act would, at all events, be one of mercy, as here the exile would be sure to perish the first winter. In November quicksilver freezes, brandy is broken with a hatchet, and from 45 to 50 degrees of cold may be noted."

The greater island of Spitzbergen is in the form of the letter N, being penetrated by two deep gulfs, one to the north and another to the south. It has even been supposed that it really consists of two islands soldered together by a glacier, but the fact has never yet been ascertained. The bay of Magdalena is on the western side, confronting Greenland; it is surrounded on all sides by mountains of granite from fifteen to eighteen hundred feet high. Immense glaciers nearly fill up the spaces between the mountains, and they are said to have a convex form, whereas those of the Alps are said to be concave.

At the epoch when the French expedition arrived at Magdalena Bay, the brief summer of the Arctic regions had just commenced, and where our fair traveler expected in nothing but gloom and silence, there was, on the contrary, a very great commotion, tumult, and noise. The ship was surrounded by floating ice, whose various forms and hues she dilates upon with a woman's prolixity. If we are to believe her, there were "clochers, colonnes, minarets, ogives, pyramides, tourelles, coupoles, créneaux, volutes, arcades, frontons, assises colossales," and "sculptures délicates," all in ice—a glossary of architecture ready illustrated.

"The sea, bristling with sharp-pointed icebergs, was loudly agitated; the elevated peaks of the coast slipped away, detached themselves, and fell into the gulf with a frightful noise; mountains cracked and split open; waves beat furiously against the capes of granite; islands of ice broke up with reports which resembled

the discharge of musketry; the wind raised up columns of snow with hoarse moanings; altogether it was terrible, yet magnificent; one fancies one's self listening to a choir from the abyss of the old world, prelude to a new chaos."

If the aspect of Magdalena Bay was not very inviting, that of the shore was not much more so. There was indeed no land visible at that time—nothing but snow, save where the beach was sea-washed, and the scene there exhibited was not that which was most agreeable to a lady.

"On all sides the soil was covered with the bones of walrus and seals, left there by Norwegian or Russian fishermen who used to come to manufacture oil in these remote regions, but for some years past they have ceased to do so, the profits not counterbalancing the perils of such an expedition. These great fish-bones, whitened by time and preserved by cold, seemed like the skeletons of giants, the inhabitants of the city which had just foundered close by. The long, fleshless fingers of the seals, so like those of the human hand, rendered the illusion striking, and caused feelings of terror. I left this charnel-house, and, making my way over the slippery soil with precaution, I went on towards the interior. I soon found myself in the midst of a kind of cemetery; this time it was really relics of humanity that lay upon the snow. Several coffins, half open and empty, had contained bodies which had been profaned by the teeth of bears. In the impossibility there was to dig graves, on account of the thickness of the ice, a number of enormous stones had been primitively piled upon the coffin-lids and around, so as to serve as a rampart against wild beasts; but the sturdy arms of the *gros homme en pelisse*—the fat man in a furred robe—as Norwegian fishermen picturesquely designate the Polar bear, had displaced the stones and devastated the tombs; several bones were scattered about, half-broken and gnawed, sad relics of ursine repasts. I gathered them together with care, and piously replaced them in the coffins. Some of the tombs had been spared, and they contained skeletons in various degrees of preservation; most of the coffins bore no inscriptions. On one, however, a friendly hand had cut, with a knife, these words: *Dortrecht, Hollande, 1783*. A name had preceded the date, but it was no longer legible. Another sailor had come from Bremen; his death dated 1697. Two coffins placed in the hollow of a rock were in excellent keeping; the bodies which they inclosed had not only their flesh on, but even their clothes, but no inscription recorded either the name or the country of the dead. I counted fifty-two tombs disseminated in this cemetery, more frightful than any other, without epitaphs, without monuments, without flowers, without reminiscences, without tears, without regrets, without prayers; most desolate come-

tery, where it seems as if forgetfulness twice enshrouds the dead, where a sigh, or a voice, or even a footfall is never heard; most fearful solitude; deep, icy silence, only broken by the howl of the white bear or the roaring of the tempest!

"I was seized with an inexpressible horror amidst these sepultures; the thought that I had come to take my place among them suddenly came upon me in fearful distinctness. I had been forewarned as to the dangers of our expedition; I had accepted, and thought that I understood its risks, yet did the sight of these tombs make me shudder, and for the first time I cast a thought of regret at France, my family, my friends, the fine sky, and the quiet, easy life which I had left, to confront the chances of such a dangerous pilgrimage! As to the poor dead men now around me, their history was the same for all. They were neither learned men who had been led thither by the love of discovery, nor curious men urged thither by the attraction of the unknown; they were honest Norwegian, Russian, or Dutch fishermen, who had come there to seek by hard toil, and amidst great dangers, a subsistence for their family. At first all might go on well; the walrus might be plentiful, the seals easy of capture; they were successfully hunted; oil was made on the coast itself; the great green ivory teeth of the walrus, so esteemed in Sweden, were shipped; they were talking of the value of their cargo, and of the profits and the pleasures of their anticipated return. And then suddenly an unexpected cold would come on; winter would seize upon them when least expected, the sea would become firm and motionless around their little ship, and the way to their country would be closed for nine, perhaps for ten, months; ten months in such a place is condemnation to death! They would be thus exposed to undergo forty-five degrees of cold in the midst of a perpetual night! What tragedies have not these solitudes seen! What must have been the agonies they suffered? By what prodigies of courage and perseverance did man keep off from day to day that death which he yet knew to be inevitable? In what manner did he sustain that supreme struggle? At first they would keep to the ship, economizing provisions, warming themselves with bear's grease, fish-bones, oil, and every thing on board that could be destroyed without affecting the safety of the ship, for that was a sacred thing; man thinks of the future even under the most desperate circumstances, and no doubt each of these poor fishermen expected to see accomplished in his person that rare miracle, a return from wintering in Spitzbergen. As the provisions became exhausted, privations would become also greater, and the Polar bear and blue fox, the only inhabitants of the islands, would be hunted with renewed zeal. Then one day, a terrible day, after the death of one of their number, after fearful sufferings, they would decide upon warming themselves with the ship; holes would be dug in the ice, a kind of hut constructed on shore, and they

would get into it and make themselves as comfortable as possible. At least they would have the satisfaction of warming themselves; but whilst the body was deriving a temporary satisfaction from the genial warmth, alas! the mind would be icy in despair; that very fire was consuming their last hope—that fire was destroying the greatest force that Heaven has given to man. What remained would be the last struggle of the instinct of preservation against death, death being always victorious; one by one the little crew would diminish in numbers, and each of those obscure martyrs would be laid down in his turn in the icy cemetery where I found them. All, thus, to the last: he, more robust and more unfortunate than the others, would have no friendly hand to tend him in his last hour and to preserve his remains by pious precautions; he would become the prey of bears as soon as he had breathed the last sigh, or even indeed so soon as he could no longer defend himself.”

Pleasant contemplations these among the sublimities of Spitzbergen! The only excuse is, that they were of a nature fully calculated to awaken such. Every thing was alike austere and repulsive: the climate was severe, the heavens were overcast, the land buried in snow and fog, the mountains were crumbling, the ice was breaking up, and sea and air were either sullenly or rudely agitated. Then as to what remained of life, it was naught but relics. Bones of the slain walrus and seal, and the tombs of the benighted slayers!

The thought of a possible detention during a winter in Spitzbergen filled our fair traveler's mind, according to her own confession, for several days after these meditations among the tombs, and she soon discovered that she was not the only one who indulged in such gloomy anticipations, but which had really no foundation whatsoever, except in the timid apprehensions of those who entertained them. It was not likely that a French scientific expedition was going to winter in the Arctic regions. One morning she was seated on a gun, buried in a vast fur cloak, looking now at the heavens, and then at the sea and the strange forms that floated on its surface, when she heard her name pronounced by one among a group of melancholy French tars. Listening, she made out the following sentences:

“What an idea to have brought a lady with us! Are voyages like this *des courses de femme*?”

“Too true,” remarked another; “and if we are caught by those fine crystals as you have

just explained to me, one may be quite sure that she will be the first to go!”

“Well, old one!” replied the first, “she will only show the way; we should soon follow her. True, we have a year's provisions on board, but we have no firing, and here there is not wood to light a pipe, whilst in winter the wind must blow pretty sharp, to judge by the dogdays!”

“And what a woman!” joined in another, in a tone of contempt; “une femme pâlotte, menue, maigrette, with feet like finger-cakes, and hands that could not lift up an oar; a woman whom one could break on one's knee, and put the bits into one's pocket. If even she had been a woman from our parts. (He was a Breton.) At Ponant we have some *commères* who think nothing of hoisting a sail or rowing a boat; our women are nearly as good as the men; but this one, with her peaky Parisian face, she is as chilly as a Senegal parrot. If we are caught by the ice, she will die of the first frost, that is quite certain.”

“There was an interval of silence, during which each man relit his pipe; then the one who had spoken first resumed the conversation by way of summary.

“Well, at the best, it does not concern us; it is for those who were stupid enough to bring her here to get anxious. If we do winter here she must do as she can—she will have to do as all the rest do.”

“An old quarter-master now broke in upon the conversation, in which he had not hitherto taken part.

“Boys,” said he, “I am sorry for you, but there is no common-sense in what you say; what you, four of the best and eldest sailors on board, you have no more nous, can't see further than that? Upon one point I agree with you, they were perhaps wrong in bringing this little lady along with us, but the misfortune is for her rather than for us; for us it is, on the contrary most fortunate, and it will even be still more fortunate if we have to winter in this cursed country than if we get out of it.”

“How is that?” exclaimed the sailors.

“It is very simple, and I will explain it to you. She is very weak, very delicate, is she not? Well, so much the better. It would be she who would go first if we were caught on the ice? Well, so much the better. These are only so many reasons for making her precious to us. The most dangerous things, you see, in wintering in the ice, the most difficult thing to avoid, is the demoralization of the crew. Captain Parry relates that it was especially against the discouragement of his men that he had to struggle; he describes in his narrative how much more he dreaded the effects of panic than the rigors of the climate. Well, we shall have nothing to apprehend from such demoralization if we succeed in preserving the life of this young lady; it will be said to those who exhibit signs of weakness: “Come, are you not ashamed? the cold is not so intense since a woman can bear it.” So I tell you we must do every thing in our power to preserve the life of this little

lady; her presence in the midst of us will insure alike the courage and the health of the crew; and I know that the captain thinks just like me on that subject; he said as much to the first lieutenant the other day when walking with him."

"Oh! if the captain has said so," unanimously joined in the group, "then it must be right."

Our fair adventurer was consoled after overhearing this conversation by the feeling that the egotism of her companions in travel would insure such attentions as would retard her death as long as possible. Yet did she nevertheless look upon such a catastrophe as certain in case they were caught by the ice, in consequence of the indisposition which she felt, notwithstanding all the anxious care that was bestowed upon her. She was allowed the captain's berth, and, when giving it up to her, he had done every thing to insure its being warm and comfortable; all the holes had been hermetically sealed, the ceiling had been covered with reindeer-skins, the bed had been heaped with eider-down; it was really more of a nest than a cabin; and yet, notwithstanding all these considerate attentions, she suffered from cold and could not sleep. The latter she, however, attributed not so much to the cold as to the peculiar circumstances under which she was placed, and more especially to what she designates as an "ultra-tonic diet!"

Our fair adventurer, it is also to be noticed, wore a garb which she declares to have been *très-commode et parfaitement disgracieux*—men's trowsers, a middy's shirt of thick blue stuff, a neckerchief of red wool, a black leather belt, boots lined with felt, and a sailor's cap, with no end of flannel underneath all. She had cut her hair, which she had found it impossible to keep in order during the passage, and when she went on deck she added to the mountain of flannel and other garments a heavy mantle with a hood, so as to reduce her altogether into a great packet without form or shape, except, perhaps, its rotundity: "additions and subtractions concurred," she intimates, "to render her very ugly; but in such a place one only thinks of how to suffer the least possible from the cold, and all coquetting is misplaced."

The recreation to be derived from researches in natural history at Spitzbergen were naturally very limited, and still more so to a lady to whom a search for marine

animals would be next to impossible in such a climate. One of the most interesting points that presented itself to her contemplation was the colored snow, which she describes as being at times of a pale green, or a pale roseate color. This coloration, which is produced by the presence of minute cryptogamous plants, is the most striking vegetation in Spitzbergen, and it is vegetation in truly its most elementary state, even more so than in the form of lichens, because nature in her prolificacy develops it even on a transient surface. A few lichens were also to be met with on bare rocks, and a tuft of black moss occurred here and there in the valleys, like bits of dark moist sponge. There were also to be found, by dint of careful search in certain sheltered crevices, a few spare, blanched, struggling plants, their flowers bending sorrowfully to the soil. These were the saxifrage, the yellow ranunculus, and a white poppy. They grew to about the size of lucifer matches.

Polar bears and reindeer are said to abound in Spitzbergen, but whether it was not the season, or our lady traveler did not venture far enough away from the ship, she did not see any. Seals, however, were in great numbers; their quiet, confiding manners soon awoke an interest, and their look, so like that of rational beings, made it seem a crime to slay them. Only one walrus was seen, but they were said to be common on the southern shores. A few blue foxes were killed by the sportsmen: they were small, spare, and ugly. Their fur was massed and entangled, and their flesh was not relished.

A considerable number of sea-birds tenanted both the rocks and ice around, but our lady traveler asserts that, instead of enlivening the scene, they only made it more melancholy. These plumed denizens of the Arctic regions were, in her eyes, voracious, ferocious, quarrelsome, and noisy. Their cries were offensive, varying from a croak to something even more dismal. Some of the gulls complained like children crying, whilst others indulged in a kind of sardonic laughter. "There is nothing in this sinister country," she adds, "for the eye to repose upon; nothing charms the ear; every thing is gloomy and miserable—every thing, even to the birds!"

Thus is outward nature made the re-

flection of a petted, spoiled, diseased imagination. To those who study the resources of a kind Providence, as manifested in its various creations, the razor-bills and foolish guillemots, the black-billed auks and lesser guillemots, with their silky plumage and strange habits, congregating on ledges of high marine precipices, sitting closely together, tier above tier and row above row, depositing their single large egg on the bare rock, yet without confusion, or the egg ever rolling off in a gale of wind or a rush of birds, alike present much that is at once interesting and instructive to contemplate. The black guillemot, known to sailors as the Greenland dove, is not only a pretty, but it is a sprightly and active bird. If the great divers make at intervals a disagreeable croaking, their swiftness on and underneath the water is curious to watch; and they live in pairs, as old Bewick has it, "with inconceivable affection." We never yet met the individual who did not say that the straggling, mixed flocks of gulls, consisting, as they almost always do, of various kinds, enlivened the rocks by their irregular movements and shrill cries, even when the latter were deadened by the noise of the waves or nearly drowned in the roarings of the surge. Michelet, we have lately seen in his admirable work on *L'Oiseau*, takes a precisely opposite view of nature in the Polar regions to that adopted by our lady traveler. "Admirable, fruitful seas," he exclaims, "replete with life in an elementary state, (zoöphytes and medusæ;) they are sought for in the favorable season by all kinds and descriptions of animal life—whales, fish, and birds—in pursuit of their daily food. It is there that they procreate each short summer in peace, and hence are the Poles the great, the happy rendezvous of love and peace to these innocent crowds." But perhaps the lady may retort, M. Mignet has not been to the Polar regions—has not passed a summer at Spitzbergen!

With her, one great idea prevailed over all others—one morbid fancy alone filled her mind, to the exclusion of all other thoughts; it was the chance of wintering in that region of which she had manifestly seen more than enough the first day she arrived there. At last she was almost on the point of seeing her fearful anticipations converted into sad realities.

"In any other part of the world except in these Polar regions, a ship is safe when in harbor; but in Spitzbergen, as I have before said, the event most to be dreaded is not shipwreck, it is a forced wintering; from one day to another, from one hour to another, the bay that shelters you may be changed into a prison—and what a prison! No dungeon can inspire a similar amount of terror! One day I was enabled to realize the fact—it was on the 7th of August. Several members of the expedition, seeing that the weather was clear and the snow being swept away by a strong easterly breeze, made a boat-excursion to Hakluyt Point the most northerly cape in Spitzbergen. The excursion was to last a day. I was not allowed to make one of it, so I remained on board with the captain, who, you are aware, never quits his ship. The early part of the day went off well enough, and I envied the lot of those who were going to get a few leagues nearer to the Pole—perchance to reach the limits of the great *banquise* of ice—the aim of all our ambitions.

"I reasoned with myself so as to calm my regrets, and finished by finding my position to be in a sufficiently elevated latitude. I said to myself that I ought not to be jealous of these poor men, whose pride had only exacted some twelve or fifteen leagues over me.

"In order to pass away the long hours when the ship, deprived of its passengers, appeared to me so deserted, I set to work writing letters, and thus filling up my solitude with all the beings so dear to me whom I had left behind. Towards four in the afternoon I was obliged to leave off, it was so dark; a dense fog would no longer permit any light to pass through the bulls'-eyes, which took the place of windows. I ascended on deck, and there I found the captain busy, looking through his telescope at a fleet of great icebergs, which were taking up their position at the entrance of the bay—a spectacle that filled me with inexpressible anguish.

"'Captain,' I said, 'what is taking place? The bay will soon be closed up by all those icebergs.'

"'Do not make yourself anxious,' the commander replied to me; 'it is not yet cold enough to solder the icebergs together. Besides, I am going to send a boat to see if a bar has formed itself there.'

"'And if the bar is formed, what shall we do?'

"The captain did not vouchsafe an answer, but busied himself giving orders to the boat to go. My eyes followed it with deep anxiety; I saw the men row zealously, turn round the great masses of ice and pass between the smaller, till at last they disappeared in the great field of floating ice. At the expiration of an hour's time they came back; it was in vain that they had endeavored to make their way out of the bay—no open passage remained; the cold which no one had mistrusted, had been sufficient to solder the icebergs and to convert them into an impassable wall of rock. Although sailors make

a rule of keeping untoward impressions 'and events to themselves. I saw that the captain looked anxious as he listened to the report of the sailors. As to me, my heart quite misgave me, and terror filled my whole soul.

"And our expeditionists!" I exclaimed; "how are they to get back?"

"That is just what puzzles me," said the captain; "they have only two days' provisions. It was very imprudent."

"And they are in open boats, exposed to the cold and snow. O Heaven! captain, it may become frightful. What will you do?"

"I will fire two or three great guns over all this to-morrow, and try and make a hole in it. As to the rest, we will wait and see what the wind will do to-night."

"The captain remained silent, walking to and fro on the quarter-deck, his glass in his hand, looking alternately at the sky and sea. For several hours no change was observable; the sharp points of the ice broke here and there the thick fog by which we were enveloped, but they remained motionless. My heart was even more sorrowful than this lugubrious horizon, and I reflected gloomily on our rashness in having come to expose our lives in those frightful regions, where every incident is a catastrophe, and where a mere change in the wind or a lowering of the thermometer may entail death!

"Towards midnight a wind sprang up, which gradually increased in violence to a hurricane; the old ocean shook her mane of foam with fury, enormous waves struck the ice, the barrier broke with a loud noise, and never did a more terrible tumult give rise to happier impressions; the bay was opened—the boats could come in! They arrived, in fact, a few hours later, and the danger they had run insured them a cordial reception."

The day after this warning a number of men were employed in engraving the name of the ship, the date of her arrival, and a list of her men and officers on the rock. "They did me the honor," the lady tells us, "to place my name at the head of the list, and if it was not the most remarkable, it was most assuredly the most strange to meet with in such a place." It was now manifest that the delay in Magdalena Bay could not be prolonged much further. Excursions into the interior multiplied themselves accordingly, and our lady often took part in them. She would, however, on these occasions separate herself from her companions. "She took a pleasure," she says, "in feeling herself alone with this grandiose and terrible nature. Deserts have every where their own poetry: deserts of sand or deserts of ice, still it is always the infinity of solitude, and no

voice speaks a more moving language to the soul!" What an interruption the appearance of a Polar bear would have occasioned to these solitary meditations among the ices!

"One day, however—and only one day—it was permitted to us to see Spitzbergen enlivened; it was the 10th of August. Early in the morning the great curtains of fog, which incessantly veiled the horizon, were withdrawn as if by an invisible hand, and wonderful to relate! the sun—a real, beautiful, shining sun—appeared; under its influence the bay assumed a new aspect! Clouds chased one another across the heavens, carried away like fleecy things, the great rocks let their mantles of snow fall off, the sea trembled and shook with the glittering ices that sank into it on all sides; it seemed as if the sun's rays had suddenly conferred life upon this dead and gloomy country, and that the earth was unrobing itself for the labors of spring. It was a thaw—a genuine thaw—noisy and joyous—a thaw every where welcomed as the end of the bad season. Alas! in Spitzbergen, thaw, spring, and summer only last a few hours! The very day that followed upon this fine one, the fog once more darkened the heavens, a gloomy atmosphere took the place of a brilliant day, the cold became more intense, gusts of wind moaned lugubriously, the icebergs remained stationary, once more soldering themselves to the rocks, and every thing began to sleep again in that icy and funeral sleep which lasts upwards of eleven months."

So brief a summer and the sudden return of winter obliged the expedition to set out on its return at once. "Toute tentative pour pénétrer plus aund devenait impraticable," we are told: but we do not gather—at least from the lady's narrative—that there ever was any more intention of proceeding farther north than there was of wintering in the Arctic regions. In these respects, the late French expeditions, as that in the *Reine Hortense*, under Prince Napoleon, and that of which *Madam Léonie d'Annet* formed a part, present a truly remarkable contrast to the navigations and winterings, and to the boat and sledge expeditions carried out by our gallant countrymen in the same regions. As voyages of discovery, although made in the nineteenth century, they are only fit to take place by the roivings of the three sons of the Red-handed Eirek, or the early pioneering efforts of a *Butten*, a *Hawk-bridge*, or a *Fox*.

It is almost needless to say how delighted our fair adventurer was at being

rowed by vigorous arms on the 14th of August out of that fearful bay.

"I saw (she says) with a feeling of deep relief the torn mountains, the sharp points, the immense glaciers of Magdalena Bay disappear successively from my eyes. I felt that I was saved from imminent danger, the greatest that, I feel assured, could ever be run, that of being imprisoned in these horrible ices, and of dying there, as our predecessors did, in the frightful tortures of cold; add to which, the contemplation of the sinister beauties of Spitzbergen had cast a veil of insurmountable melancholy over my spirits. This country is indeed strange and frightful, and if one is not seized with an absolute panic on first nearing it, it is because one has been prepared by degrees for the lamentable aspect that it presents. The islands of Norway and the North Cape are stations, the sight of which gradually initiates the eye to scenes of

desolation; but if it was possible to be transported without transition from our cheerful Paris to those icy latitudes, I have no doubt but that the most courageous would be seized with serious fright."

So much for an expedition the proposed objects of which were, according to the statement made by Madame d'Aunet of what M. Gaimard expounded to her at the onset, to penetrate sufficiently into the Polar regions to determine if one can pass that way from Europe to America! However, if M. Gaimard was not a Colinson or a M'Clure, the experiences of a lady at the *gates* of the Polar regions (and Spitzbergen can not be designated as any thing more, as compared with Melville Island or Banks Land) are, at all events, exceedingly amusing.

From the British Quarterly.

THE ATOMIC THEORY—ESSAYS SCIENTIFIC AND LITERARY.*

AMONG our chemical acquaintances there are some who are walking cyclopædias of the science, who can tell you off-hand the formula of malachite, or the average per centage of nitrogen in Canadian flour; but there is no enthusiasm about these men, they care little for general laws, and will certainly never discover any. On the other hand, there are chemists whose aspect and language breathe an intense love of science, and a fitness for seizing the latent analogies and significance of natural phenomena; yet their memory of particular facts is often treacherous, and in experimenting they may omit most necessary precautions. It is astonishing, too, how different science is to different votaries:

"To some she is the goddess great,
To some the milch-cow of the field,
Whose business is to calculate
The butter she will yield,"

—whether that butter come in the form of what is understood by *bread and butter*, or that less substantial commodity which gives the flavor to after-dinner speeches and other laudatory effusions. Some men take up chemistry because it is a gentlemanly profession, others because they are impelled to it by an irresistible love; some delight in building up the facts of the science, others in evolving its doctrines. Again, there are chemists of an inquisitive and contemplative turn, to whom nature reveals her secrets, while there are others who at once apply this knowledge to some practical end with material advantage to themselves and their fellows; and as these belong to two opposite types of intellect, it rarely happens that either is capable of success in the department of the other. To this theoretical class, animated by an intense love of science, and caring little either for minute detail or for material profit, belonged the subject of our present sketch.

In the quaint old country town of Had-

* *Lectures on the Atomic Theory, and Essays Scientific and Literary.* By SAMUEL BROWN. 2 vols. 8vo. Edinburgh: 1858.

dington, some half century ago, lived a man of great energy and moral worth, who was known by his neighbors as a kindly and industrious citizen, and by Scotland at large as the founder of the system of itinerating libraries. His name was Samuel Brown, and he was the eighth son of John Brown, also a notable man in his day and generation, the author of the *Self-interpreting Bible*. Around the table of Samuel sprang up a family of children, and it is to the fourth son, born in 1817, and on whom was bestowed the paternal name, that we are about to introduce the reader. Samuel the younger, as he grew up, entered with spirit into those chemical experiments in which his father sometimes dabbled; and the souls of both were moved by the rhetoric of Chalmers as he discoursed of the mighty genius and childlike purity of Newton. Throughout his life the son exhibited many of his father's and grandfather's estimable qualities; whilst to them he added one derived apparently from his maternal grandmother, who had caught "the rare and ill-beloved trick of thinking for herself, and of trusting her thoughts."

Unless in a certain enthusiasm of action, his boyhood was in no way remarkable. At fourteen years of age he left the school of his native town for the High School in Edinburgh, and in the session of 1832-3 he entered the University as a student of medicine. To medicine, however, he seems not to have paid any greater attention than barely sufficed to procure his doctor's degree, for by this time chemical science had taken full possession of his soul, and already in his brain was born that great idea which it was his life-purpose to prove and elucidate.

In June, 1849, he married, but the joys brought by this new relation were sadly interfered with by a marked deterioration of his health, and for seven years he was afflicted with a painful disorder. Yet he continued his literary labors, and solaced his mind with the friendship of some of the choice spirits of the age. He planned and partly executed a poetic history of all the sciences, and a prose work that was to embrace the entire mutual relation of God, man, and nature. During this time his spiritual being had made no little progress. From youth the religious sentiment had been strong within him, but the independent and antagonistic character of his mind had alienated him from every

form and embodiment of Christianity, and he found himself at home in contributing to the *Westminster Review*. In his discipline of suffering, however, he was gradually led to a humble trust in Christ, his writings breathed more of the spirit of piety, and when drawing near his end we find him using such language as: "Pray for me; often I can little command my own thoughts now: pray for me; not for cure or alleviation—these are mean things to ask from a Father in heaven—but that his perfect will may be accomplished in me." He died on the 20th of September, 1856, in his thirty-ninth year.

Shortly after his death there appeared in the *North-British Review* a biographical notice of Samuel Brown, written by a loving friend, and it is mainly from this that we have drawn the materials for the above sketch of his life. His miscellaneous writings have now been collected together, and published in two octavo volumes, and this is the book to which we wish to draw the reader's notice. It contains the development of his chemical views in several lectures, many essays on scientific and literary subjects, and reprints of his best articles in various Reviews.

In these volumes, will be found something to suit almost every taste; there is hard reasoning and beautiful imagery, and their author is by turns philosopher, historian, theologian, and poet.

We give some specimens of his style. We select the following as worthy of extract, on account of the thought as well as the language. This is from a description of a solar eclipse:

"The day at length arrived—it was a Sunday. The churches were closed on purpose. The street swarmed awhile, as if it were some judgment-day, and they were then left empty of every thing but fiery heat and dust. The Calton Hill was covered, as with a flight of bees. So were Salisbury Crags and Arthur's Seat. The castle, the tops of monuments, the roofs of great buildings, the spires of churches, were all heavy with holiday star-gazers. The hum of the clustering crowds thickened the air. The cry of 'One minute more' ran through the multitude, and all were hushed; but as soon as the shadow commenced to stalk across the glorious orb, the hum began again, smoked glasses were handled, small science was talked, and the people went their ways glad that they had seen and understood the mysterious apparition. Ignorant savages would have thought it was the finger of God, but the inhabitants of Edinburgh knew it was no such thing!"

Here is another extract :

"Sciences grow like trees. The purely speculative are endogenous, and swell outwards from within, like the palm, stretching the fingers of its leaves to heaven ; the unmixed practical are exogenous, and ring succeeds and embraces ring every propitious year, like the spreading oak which shades the land and furnishes timber for the sea ; and the applied combine the nature of both."

The following extract closes Dr. Brown's review of George Herbert :

"The constellation of the Lyre, and the birth-place reminiscences of an early life, under the roof of godly parents, combined to draw our thoughts into high Bible tracks. Yielding to the soft and almost paternal guidance of the place and of the hour, we flew aloft on the imaginative wing of faith to those argent fields of industrious peace, where 'the spirits of just men made perfect' shall 'summer high in bliss' forever. There was David the royal singer, sitting apart upon a pleasant hight before our willing eye. Bending over his harp in wonder and in love, and sweeping his prophetic fingers over the wakeful and awaiting chords, he interpreted the hieroglyphics of nature as they rose on his view, and rolled away 'in silent magnanimity' before him ; he interpreted them into the living voice of song, and the nations of heaven gave ear. 'Hark !' we whispered to the listening night, 'how he thunders out the glories of our own magnificent firmament in full diapason : a worthy overture to all that is to follow. Listen again : he comes to the system of the sun, a majestic interlude, but also big with a tenderer meaning to the sovereign lyrist himself ; for what a soft, melancholy, home-toned bar is floating from about him now ! It is his own dear old world, where he struggled, and fell, and rose again a thousand times and more. Notice how his eye glistens, and his hand trembles, and his voice falters and wails, while he utters in intelligible strains the other meaning of the pale reflective moon, and the cool just sky, and the heaving true-hearted sea, and the bountiful green earth ; ay, and Kedar's monotonous wilderness afar, and the skipping hills of Judah, and the muttering brook of Kedron, and the holy city of Jerusalem, and the ever-fragrant Temple of Solomon his son !' But he might not tarry. There lay an out-spread universe before him, and away he sped, climbing a thousand times ten thousand milky ways with his regal eye, and pouring forth an unending flood of music, meaning more than the ear can understand.

"Alas ! we are now many years older than then, and find such rapturous apprehensions or deliriums only in the house of memory, when some voice like Herbert's approves itself a spell, and opens the chambers that are haunted by those ghosts of the past."

In considering the different subjects treated of in these *Essays*, our attention is first arrested by that great idea which held Dr. Brown enchained throughout his life, the central conception round which the whole of his scientific teaching revolved, which has been indissolubly associated with his name, and which, in the recesses of his laboratory, he ever strove to demonstrate—that laboratory which he himself has called

"Study, rest-room, place of toil,
Temple too where I have lent
All my days to noble toil,
Shifting, homeless, blessed tent,
Here to-day, to-morrow there,
Where my impassioned life is spent
Still in burning hope and prayer."

But how shall we initiate the unscientific reader into this atomic theory ? We will do our best ; and should we not perfectly succeed, we must still crave his permission to explain it for the benefit of those whose studies have already furnished them with some preliminary knowledge.

THE ATOMIC THEORY.

These words carry us back at once among the ancient Greek philosophers, and into the very presence of skeptical, laughing Democritus, who sought out truth though she lay, as he himself said, at the bottom of a well ; and turning his eyes to the milky way, conceived that it was no extended band of light, but a vast congeries of independent stars ; and having climbed thus high, showed little reverence for the struggles of poor humanity. His notion was, that each piece of solid matter was not a uniformly extended substance, but an agglomeration of vast multitudes of atoms, particles incapable of subdivision, not perhaps in contact with each other, but separated by inter-spaces far too minute for any mortal eye to recognize.

Like many a beautiful theory of Grecian birth, this idea of atoms slept the sleep of oblivion during the middle ages, till resuscitated by the Cartesians, it had at once to wage a war for very existence. There rose up an army of mathematicians, who battled the finite divisibility of matter with such arguments as these: "Whatsoever possesses length, breadth, and thickness, whatsoever has dimensions, in short,

is essentially and mathematically divisible, that is to say, can be supposed to be halved, the halves halved again, and so forth forever;" which would have been a very conclusive argument had the matter in question related to human conception, and not to actual fact. The atomicians, with Newton at their head, argued that, were the invisible particles of matter not adamant and perdurable, they must, in process of time, wax old, and crumble; and the matter (say the water or air) must change in properties with time, which it does not—an argument more satisfactory to the one party than convincing to the other. On the scene now appeared that independent Quaker of Manchester, John Dalton, with a new philosophy of chemistry, for which the theory of Democritus served as an admirable framework; yet the laws of Dalton are equally true, and equally conceivable, whether the ultimate particles of matter occupy a determinate and never changing space or not; and chemists now, whether their minds incline to the conception of definitive indivisible particles, or of mere centers of force, are constrained to think of chemical atoms, simple ones, like the sun, or the planet Venus, or compound atoms, like the system of Jupiter and his satellites. Whether there be physical atoms or not, there exist unquestionably groups of particles which no mechanical operations are capable of dividing. Thus Brown concludes in a passage which we quote, mainly because it so felicitously expresses an important truth, the bearing of which extends far beyond the limits of natural philosophy:

"Atoms are not essentially indivisible, but they are never divided; both the old parties were wrong, and both of them were right. They were severally right in what they affirmed, and wrong in what they denied—an immensely frequent, if not an unailing double circumstance in the controversies of mankind. Enuclate the affirmation of almost any sect in any science, including theology and politics, and you have truth so far as it goes: winnow and catch its negations, and you have error. The process of elimination is often difficult, but it is infallible; and hence it is the deniers that are the do-nothings, marplots, and hinderers in this world; happily as impotent a folk, in the long run, as they are evil-eyed and maleficent for a time. For heaven's sake, now that Christ has come, and exemplified the blessed art once for all, let us see that we do not waste breath, heart, and brain in mere denying any longer.

Save every spark of the vital fire for your affirmations rather, that they may be strong and clear. But do not merely put your negative in an affirmative form, and cheat yourselves obstructing us. Never assert that Napoleon the Grand was the Emperor of France, if you thereby mean at the same time to deny that France ever had, has now, or ever shall have another as grand! Do not swear to the infallibility of the Spirit of God in the Pope, Pius, Impius, or whom you will, if your oath mainly intends to deny the infallibility of that Spirit in any other Christian man. To come down from such high and mighty specialties to the neighborhood whence we lifted ourselves up to them, do not affirm that your own experiments are right, if your purpose is just to deny that mine were as right as yours. It therefore behooves the true and completed man of science to lay down no exclusive propositions. On the other hand, he may withhold belief from the affirmations of another; but he will do well to trample nothing affirmative under foot, to reject nothing with an empty—No."

Dr. Brown's idea of atoms is this:

"Each sensible form, or part of sensible nature, is hypothetized as being made up of individually insensible particles, by no means essentially or even potentially indivisible, but indivisible by such forces as divide their aggregates, and consequently never divided in the mechanical any more than stars are in the astronomical operations of Nature."

By this language he conceives himself not committed either to agree with, or to oppose, the materialistic or the idealistic philosophers, the mathematicians who hold the infinite divisibility, or the physicists who deny it; he avoids, too, the error of calling the ultimate particles "solid nuclei," while it is evident that, as they constitute a substance in its gaseous and liquid as well as solid state, and are themselves unchangeable, no one of these three conditions can be predicated of them—conditions which entirely depend on the manner of aggregation. In his definition he refers to that sublime analogy between the firmament and every bit of brute matter, which Democritus first seized, and which, in one of his lectures, our author has elaborately worked out. In the sun, his planets, their satellites, comets, the fixed stars, the milky way, and the most distant nebulae, he sees systems of atoms, variously compounded; or rather, in each stone he finds astral systems and "sermons" too. Indeed, he is so taken with the analogy, that he sometimes seems to think that it proves his

point, and demonstrates, too, that the ultimate particles are not near together, but far distant in proportion to their size, as the heavenly bodies themselves.

To this idea of the nature of atoms, Brown added the further notion, that "a particle is a molecular nucleus, surrounded by five polar spheres of force," five at least, and the function of each he particularizes! But into this transcendental philosophy we care not to enter, especially as he confesses that it is no essential part of his theory. We shall come presently to ideas more capable of proof or disproof.

"In the art of experiment, and in trying to find his way with untripped step among details, the Greek was as feeble as a child: whereas, in the sphere of ideas and vast general conceptions, as well as in the fine art of embodying such universals and generalities in beautiful and appropriate symbols, it is not a paradox to say, that he was sometimes stronger than a man."

So says our author, and most truly does he say so. Let us with his introduction, visit two or three more of these Grecian sages. First, Thales of Miletus: we find him watching the mighty ocean in its quietude or its wrath, the spray, or the silent exhalations rising to the sky, the clouds and the fructifying showers; watching, too, the mountain rills and larger streams, and the moisture permeating every substance, water the life of the landscape, and the life, too, of every flower, and of those countless tribes of animated beings; and we wonder not that there arose in his mind the grand conception that water is the first principle of things, the prime matter, the underlying essence, of which the whole of nature is but the manifold expression. From Thales we pass to Anaximenes, and marvel not, that with the simplicity of a child before the mysteries of nature, he saw in the all-prevading invisible wind "blowing where it listeth," the very symbol and impersonation of spirit, and thus discoursed of air as the prime intelligence, the soul of all things, which manifested itself to man under all the varied forms of the visible universe. Samuel Brown seems not to care about introducing us to the misanthropic, mournful Heraclitus, but we must, at least, remember that he transferred the idea of the fundamental element to fire, and found in it the god of his pantheistic philosophy. Empedocles, the man of station and law-giver, turned his poetic mind to the in-

vestigation of science, divine and natural; and though millions before him had seen a stick burn, to him first it was a philosophical experiment; and as the heat resolved the wood into ascending flames, and smoke, and moisture, and residuary ashes, he conceived the notable idea that fire, air, earth, and water, were the elements of which it was composed; and with the looseness of Greek generalization, he taught that these four constituted the whole universe. Yet the four seem sometimes to have been thought of as only the first unfolded forms of the *πρωτη ύλη*, the primal matter.

After a long interval, we find Geber teaching in his *Summa Perfectionis* that arsenic, mercury, and sulphur, are the real elements; and that all metals are compounded of the two last in different proportions, and are consequently transmutable, or ought to be—and so through the mystic period of Arabian and European alchemists, till Bombastes Paracelsus, in the might of his incomparable vanity, did his best or worst to overthrow them and the Greeks; believing, however, himself, all the while, in the existence of one only principle. We next find Lefevre repeating with more practical notions the old experiment of burning wood, and demonstrating that the deduction of Empedocles was no adequate expression of the truth of nature. Following his scent, succeeding chemists took to analyzing, not only the water, vinegar, wood-spirit, smoke, flame, and ashes which he obtained from wood; but every thing else that they could bring under the power of their solvents, alembics, and crucibles; till Lavoisier, in his *Traité Élémentaire*, could write: "Chemistry then marches towards its goal, and towards its perfection, by dividing, subdividing, and subdividing yet again; and we know not what shall be the termination of its success. We can not then be assured that what we regard as simple to-day, is so in reality; all that we can say is, that such or such a substance is the actual termination of chemical analysis, so far as it goes; and that it can not be subdivided any further in the present state of our knowledge." Though Davy resolved into compound bodies the earths which Lavoisier only conjectured might contain oxygen, we have made little progress in subdivision since his day. For half a century the metals, and other so-called elements, have resisted

the attempts of chemists to win from them the secrets of their composition, though fresh ones are being constantly added; and the list which when Brown lectured amounted to fifty-five, now numbers upwards of sixty.

To show the composite nature of these "elements," was our author's great ambition, as indeed it has been the ambition of many another chemist; but he had, moreover, a notable hypothesis, in favor of which he conceived himself able to advance strong analogical arguments, a hypothesis which he has expressed under these four heads:

"I. The fifty-five elemental forms are all compound. II. They are compounds of equal and similar atoms, so that it is within the scope of natural possibility that they may all be derived from *one* generic atom. III. The fifty-five are the interrupted links of a chain which is not straight, but probably a network wrought into the form of a cone. IV. These links, even as they are, naturally fall into isomeric groups, like the following: oxygen, sulphur, selenium, tellurium; carbon, boron, and silicon; fluorine, chlorine, bromine, and iodine; and so on."

The last of these propositions is recognized as true by every chemist. The self-involving matter is what Paracelsus calls—

"The Great Mystery which no certain essence and prefigured or formed idea could comprehend, nor could it comply with any property, it being altogether void of color and elementary nature. The scope of this Great Mystery is as large as the firmament. And this Great Mystery was the mother of all the elements, and the grandmother of all the stars, trees, and carnal creatures."

Of course if this "Great Mystery" be x , her children, the elements, will be $2x$, $3x$, $4x$, $5x$, and so on, and her grandchildren, the stars, etc., will be only compounds of these after the fashion of $3x + 5x$.

This idea that all the elements may be isomeric compounds, and hence indecomposable, is doubtless an ingenious one, but its author evidently thinks it more than a hypothesis. Yet, can he prove it? Here unfortunately he fails, fails utterly. It is true he thought he had effected a transmutation which lent great weight to his view; but this, the conversion of carbon into silicon, has been shown to be a mistake.

But it is in his historical sketches that

Dr. Brown excels, when he traces the history not so much of men or of nations as of philosophical ideas. From the nature of the case, no extract of reasonable length would give a fair indication of his powers in this respect. We shall not, therefore, revert again to the Greeks, "who had to discover the art of discovering chemistry;" nor shall we visit the Arabian polypharmists nor the European alchemists, though our author revels in describing these men, from Roger Bacon to Paracelsus, "a race of brawny inquisitors, inspired by ideas great enough to enable them to live aside from the world, if not above it, on the one hand, and to do a good day's work for the world on the other"—a description that is far too honorable for their degenerate successors, weak visionaries, who tortured nature for gold, and printed mystical trash. Well does Brown trace the rise of the phantom Phlogiston, first evoked by Joachim Becher, "a man of an eccentric and keen spirit, a scholar of liberal cultivation, and a wanderer upon the surface of the earth," and the elaboration of the hypothesis by the systematic Stahl, who wrote his five folios on the "foundations of chemistry," in a language concocted, according to the receipt, "three parts of good dog Latin, two of German, one of etceteras, and a dash of new Greek, to say nothing particular about a pinch of Arabic."

These *Essays* are full of brief biographies, and a longer one is given of Sir Humphry Davy in a distinct paper. Would that there were more such, or that Brown had perfected his idea of tracing the historical development of each of the sciences in a series of sonnets descriptive of the different nations or men who have wrought it out. Of these series one only is completed, that pertaining to astronomy, and only one of these metrical portraits will we transcribe, hoping it may incite the reader to warm his imagination with the whole.

KEPLER.

"Teutonic Kepler, spurning due control,
Pythagorean wild, harmonious soul!
To what strange conch didst thou apply thine ear,
And catch the music of the solar sphere?
Or, was the sphere itself that mystic shell,
Brought hither from the ocean shore divine,

Still crooning o'er its secret like a spell,
 To other ears a hum, a song to thine?
 Rapt in harmonic ratios, laws and rhymes,
 Thou couldst not watch the turns, nor keep
 the times
 Of life prosaic, and therefore thou wert
 poor;
 Thy bread uncertain, thine ambrosia sure:
 This low-lived world might lift her head
 again,
 Could she but rear a race of such poor men!"

We must find space for

AN AFTER-THOUGHT.

"There's no repose within this optic sphere;
 The world is like the soul, though not so
 fair.

The young moon waxes, wanes, and follows
 where

Dear Earth is hastened in her fond career;
 Unresting planets run with love and fear;
 Tormented comets leave their distant lair;
 Imperial Sol himself is glad to share
 The common fate: he wanders wide, I hear,
 Within the Milky Way. It might appear
 That all the firmaments revolve afar,
 Circling the Throne of Him, whose only bar
 Is his own making; ; nay, that Heaven is
 near:

God is the present soul of every star,
 His central home is here as well as there!"

In his essay on the *The History of Science*, Samuel Brown endeavors to show the desirableness of presenting science "clothed with its own biography;" and he points out a desideratum in this age when so many men of general culture wish to become acquainted with what is best in each of the sciences, and how it may be met.

"Facts are the body of science, and the idea of those facts is its spirit. In order that the poet, the artist, the man of letters, the politician, the professional person, or the man of general culture should become possessed of essential science, and crown himself with the very flower and fruitage of the long year of investigation, it is not necessary to enter the observatory, the laboratory, the museum, or the dissecting-room. Nor must he peruse the best text-books. The superficial volumes of popular science will not serve his purpose. It is another and a new class of works that is wanted. These must be brief and sculptural. They must at once lay bare the spirit of science after science; they must exhibit the ideas of the sciences and illustrate these ideas by as few and as principal facts as possible, containing shapely principles, and not a huddle of elementary observations. They must be metaphysical, rather than physical treatises. Their authors must have the

same kind of ends in view as the wiser teachers of the mathematics. It is not the mathematics, but a mathematical way of thinking, not natural history, but a classic way of thinking, and not natural philosophy, but an inductive way of thinking, that are to be shed into the mind of the general student."

Entering upon the consideration of the manner in which a knowledge of nature has been gradually acquired, our author gives a full and critical exposition of the view propounded by Auguste Comte in *La Philosophie Positive*, of which the following is an epitome, not taken, however from the same, but from a later essay:

"According to that vivacious, far-sighted, and muscular critic, there are, and in a manner must be, three principal epochs in the growth of each science, and of all the sciences together: the childish religious, the boyish metaphysical, and the manly positive epochs of development.

"It need scarcely be added that this great writer considers the positive or Baconian era as the consummation of all inquiry, and thinks the method of discovery by observation and induction the perfection of philosophy, destined one day to carry humanity to the heights of attainable bliss. It must be avowed in passing, and merely avowed, that this appears to be at once an error of fact and a breach of the very methodology which is exalted. There is surely a fourth epoch of scientific method beginning every where to dawn upon the world. It is preparing as we have been accustomed to think, to combine the descendentalism of Plato and the idealists with the ascendant processes of Bacon and the sensationists, and likewise to render the long-awaited union worthy of mankind, by shedding into it the spirit of Christ and his disciples. As a fine generalization of the past history of the purely ascendant sciences, however, the doctrine of Comte is most important and interesting, and it will always well repay the private labors of the task, to trace the evolutions of the law in the genesis of any science in particular, or of the sciences considered as an organic whole. To be brief, since the subject is really beyond our present bounds, this historical speculator's three ages might have been distinguished by a more reverent and affectionate critic, as the superstitious, the fictitious, and the real."

THE FINITE AND THE INFINITE.

Errors appear to us to run through his metaphysical treatise, *The Finite and the Infinite*, though we have there the fruits of more matured and more reverent thinking. He starts with the assertion—"It is the inalienable prerogative of man to pray

to God. It is the royal condition on which he wears the crown of nature; although the condition is ill-fulfilled, and his glory is therefore dim. In every clime and in every age, however, he builds himself an altar; nor is there any man, be his metaphysical creed what it may, or be he ever so far from God in the spirit of his mind, but sometimes utters himself in willing or involuntary prayers." Believing that man perceives the Almighty directly, and not through any conscious or unconscious demonstration, he attempts to solve the metaphysical problem of how this comes to pass. Starting with the idea of Me, he inquires what is the opposite of this idea; for each idea involves its antithesis, as beauty supposes deformity, unity multiplicity, and so on; and this he conceives not to be the *non ego* of the Germans, for, says he, "Non-me is no more the logical antithesis of Me, than non-beauty is that of beauty, or than non-unity is that of unity. The opposite involved in Me is Thou. The idea of Me is grounded in being, and doing; and its true antithesis must also be grounded in being, and doing;" in fact, must be like Me, a person. And Me is finite; Thou, therefore, must be infinite. Such our author surmises to be "an analysis of the genuine and unfallen self-consciousness of man," exhibiting "the rational ground and secret process of that sacred intuition, whereby he beholds Him whom no man hath seen, or can see, with the eye of sense, or that of the finite understanding." After showing that the mere sensualist and the mere idealist are alike liable to forget God, and to disbelieve in prayer, he enters on the controversy as to the perception of matter. Into this we shall not follow him, nor yet into his attempt at elucidation of the reason why man intuitively sees and believes in the world of sensation, and that he immediately refers that world to God as its continual Creator. We think there is some obscurity of terms, if not of ideas, though we admire the attempt, and heartily accept the conclusion which he has expressed by the metaphor: "Nature is the spontaneous word of God, being spoken, and that according to rhythmical law like the speech of poets."

Without feeling disrespectfully towards the *Bridgewater Treatises*, or despising the study of natural theology, we do believe that science has offerings in store

richer far than any which she has yet presented in the temple of Divine Truth. The book of Nature and the volume of Revelation are inscribed by the same hand; they are different thoughts of the same Supreme Intelligence. The honest and reverential study of the one can not be opposed to the honest and reverential study of the other. Yet a foolish antagonism has often sprung up between the cultivators of these two great departments of knowledge; the theologian, as though he secretly mistrusted the Bible, has often looked with suspicion on the advance of natural science; and many a philosopher, as some science began to shape itself from the chaos of early observations, has hurled it against the statements of divine Revelation; but those redoubtable buttresses have remained unshaken by the puerile attack, while not unfrequently the weapon has recoiled upon that infidelity which exultingly flung it. Where, moreover, science has been recognized as a handmaid of religion, its only province has been generally thought to be that of lifting the soul "from nature up to nature's God," by demonstrating the power, wisdom, and beneficence of that Being who (as we believe on totally different grounds) spake by prophets and apostles and the incarnate Word; or, perhaps natural science has been valued as sometimes affording a beautiful illustration, or a striking simile, whereby to enforce some revealed truth. Now, beyond this province, we believe there lies one as yet scarcely trodden by human footsteps, but which when cultivated may yield rich harvests to the glory of God as well as the service of man. The two books of nature and of revelation are not merely written by the same hand, they are to a certain extent written in the same style; both are marked by a wondrous variety yet with a certain unity pervading it, in both we observe the frequent repetition of typical ideas, in both we note the same absence of scientific arrangement. Any department of nature will illustrate our meaning. We select the group of the Mammalia. We find the earth covered with different species of animals resembling one another in their way of nourishing their young, but we do not find them classified in nature. One Continent is not inhabited by those that ruminate and another by those that gnaw. The tiger in an Indian jungle is allied to the cat on our hearth-rug; the antelopes

of South-Africa to the Persian gazelle, or the Alpine chamois. The ox, the weasel, and the rabbit take up their abode in the same field. Or, to look at the subject in reference to time instead of space, the mammalian type first meets our eye at Swanage or Stonesfield among the *débris* of the oolitic period, then come mammoths and elephants, and megatheria of all sorts, now extinct, and the rich zoölogical treasures of Kirkdale or Montmartre, till among the luxuriance of a recent fauna, man himself, the noblest of the mammalia, appears on the stage of this world's history. Placed in the midst of all this apparent confusion of animals, the zoölogist has carefully to collect his facts, before he can hope to generalize, or to discern typical resemblances, and build up a system; and then he meets with the whale and the bat to show how untrue to nature are the sharp lines of his classification. Just so in God's word, we have here a promise, there a tender exhortation, a doctrine lies embedded in a narrative or an argument, a precept is conveyed in a burst of poetry or a group of proverbs. But in vain do we search the Bible for any body of divinity; for any theological system; we do not find one part devoted to the office of God in the scheme of Redemption, another part to what is necessary on the side of man; we do not find a definition of original sin, or an exposition of the Trinity. The materials are all there, from which the student may frame his own classification, and draw his own lines of definition, which after all will be but a faulty mapping out of divine truth. The method of God in the two books of nature and revelation being the same, our methods of investigation must be similar. The canons of interpretation

applied to the one must stand in close relationship to those suitable for the other. There must be the same careful collation of facts, the same distrust of our own hypotheses, the same humble tracing of the Divine plan, the same perception that a name is not an explanation, and that a good theory must embrace every known instance and be susceptible of modification so as to embrace any which further research may bring to light. The dangers to which the students of nature and of the Bible are exposed are almost identical, as any one may see to an extent that will probably surprise him, if he will write out, as we once did, the second chapter of Bacon's *Novum Organum*, that on Idols, changing every word that relates to natural philosophy to an analogous one belonging to divinity, and substituting some theological error in place of each scientific one adduced by way of illustration. It will be advantageous, therefore, for the student of natural science to know the canons most fitted for interpreting Scripture, and for the student of the revealed Word to know the canons best fitted for interpreting nature. Indeed, as the deductions of physical science are for the most part less liable to be affected by the prejudices and feelings, the hopes and fears of their investigator, and are more susceptible of direct proof, it is to be anticipated that the true methods of discovery will be more accurately, or, at any rate, more generally recognized in that direction; and that through understanding the manifestation of God in external objects, a man will become doubly prepared to read aright the incomparably superior manifestation of Himself in his written word. But as yet this is an almost untried path.

From the Edinburgh Review.

THE CELTS AND THE GERMANS.*

IN attempting to reproduce a distinct and precise impression of the social and intellectual life of the ancient Greeks and Romans, it is necessary to keep steadily in view the narrowness of their geographical horizon, and the slow rate at which it was enlarged by commerce, conquest, and scientific discovery. At the time of Herodotus, the Greeks had, in Asia, become acquainted with a considerable part of the Persian empire; and, in Africa, the Nile had carried them into the interior of Egypt; but to the west and north their knowledge did not reach much beyond the shores of the Mediterranean. With the chief part of Europe, the Greeks of that period were wholly unacquainted; they had never sailed beyond the Straits of Gibraltar; the western shores of Spain and France, Britain, Germany, and Scandinavia, were as unknown to them as America or Australia.

The great hero, Hercules, who was conceived in the light of a civilizer and benefactor of mankind; as destroying wild beasts, as punishing tyrant, as opening roads over impassable regions, was believed to have made the Straits of Gibraltar the term of his expedition to the far west, and to have there erected two columns, as memorials of his extreme course. These pillars, beyond which, according to Pindar, every thing was inaccessible and unknown, were converted, by the rationalizing tendencies of the later Greeks, into natural objects; into rocks, promontories, or islands. The early Greeks, however, understood the Pillars of Hercules in a literal sense, as they are represented on the pillar dollars of old and new Spain. The same hero was supposed to have erected similar columns on

the shores of the Pontus; and thus Euripides speaks of the Black Sea and Mount Atlas, as the proverbial extremities of the known world to the east and west. Even the cautious and skeptical Aristotle believed that the sea beyond the Pillars of Hercules was unfit for navigation. Practically, the ancients regarded the Mediterranean as a lake, and their navigation would not have been perceptibly affected if its western, like its eastern, extremity had been closed by an isthmus.

The voyage of the Argonauts is purely fabulous, and no inferences can be drawn from it respecting the history of commerce or geographical discovery; but it is certain that the Greeks of Asia Minor had, at an early period, sailed into the Black Sea, and Hellenic colonies had begun to be planted on its coasts so early as the seventh century before Christ. The Cimmerian Bosphorus and the Palus Mæotis are mentioned by Æschylus; and an epigram, attributed to Simonides, alludes to the distant Tanais. Herodotus was well acquainted with this river, (the Don,) which he describes as flowing into the Lake Mæotis, and as dividing Europe from Asia. But the Caspian Sea lay beyond the range of the distinct vision of the Greeks. Artemidorus, of Ephesus, a geographer who lived about 100 a.c., declared that the country east of the Tanais was unexplored. Even after the expedition of Alexander, the Caspian was believed to be a gulf of the Northern Ocean, with which it communicated by a long narrow channel. The Greeks were ignorant of the Volga: this river first occurs under the name of the Rha, in the writings of geographers and historians who lived under the Roman empire. Pliny, indeed, informs us that, with regard to the Palus Mæotis, his contemporaries believed it to be connected with the Great Northern Sea. Some thought that it was a gulf of the ocean, while others held it to be a lagoon, separated from the sea by a narrow strip of land. So imperfectly acquainted were the Greeks

* *Kelten und Germanen, eine historische Untersuchung.* Von ADOLF HOLTZMANN. Stuttgart: 1855. One vol. 8vo.

Das ethnographische Verhältniss der Kelten und Germanen, nach den Ansichten der Alten und den sprachlichen Ueberresten dargelegt von Dr. H. B. C. BRANDES. Leipzig: 1857. One vol. 8vo.

with the geography of the lands to the north of their own country, that in the reign of Philip the Fifth, of Macedon, (181 B.C.,) it was generally believed that the Black Sea and the Adriatic, the Danube and the Alps, could be seen simultaneously from the top of Hæmus.*

Herodotus is ignorant of the Alps as a chain of mountains: he calls the *Alpis* a river flowing northwards from Upper Italy, and falling into the Danube; he likewise describes Pyrene as a town near the sources of the Danube. It was, he says, unknown, in his time, whether Europe was bounded by sea on the west; he expressly states that he had been unable to ascertain this fact from the testimony of any eye-witness, notwithstanding his endeavors to obtain information on the subject. Polybius, the consistent enemy of exaggeration and imposture, declares that, in his time, (about 150 B.C.,) nothing was known of the northern parts of Europe, lying between Narbo, in Gaul, to the west, and the river Tanais, to the east. The prevailing belief of that period was that the ocean stretched across the north of Europe, from the neighborhood of the Caspian and the Sea of Azoff, to the Straits of Gibraltar. That the belief in a circumfluous ocean, connecting the northern shores of India with Germany, continued to hold its ground for some time longer, appears from a curious anecdote preserved by Pliny and Mela. Q. Metellus Celer, when pro-consul of Cisalpine Gaul, in 62 B.C., received as a present from the king of the Suevi, some Indians, who were said to have sailed from India for purposes of trade, and to have been carried by contrary winds to Germany. The Suevi dwelt on the eastern bank of the Rhine; and their donation must have been sent to Metellus across the Alps.

The name of Britain seems to have been first made known to the Greeks by Pytheas, a Massilian navigator, who lived at or soon after the time of Alexander the Great. Pytheas published an account of a voyage which he declared himself to have made along the north-western coasts of Europe. He stated that he had visited Britain, and traversed the whole of it by land; he likewise gave an account of a marvelous island named Thule, situated six days' sail to the north of Britain, near

the frozen sea; he did not profess to have reached this island; he stated, however, that it was composed of a substance which was neither earth, air, nor water, but was something compounded of all three, and resembled the *pulmo marinus*, a mollusca found in the Mediterranean. Of this substance, he asserted that he had seen a specimen. He likewise gave an account of amber being found in a northern island, opposite a shore of the ocean inhabited by the Guttones. He added that, on his return, he had sailed along the whole coast of northern Europe, between Gadeira and the Tanais.

The criticisms of Polybius and Strabo prove conclusively that Pytheas was to a great extent an impostor, and that the account of his voyage to these remote regions is entitled to little or no credit. The name and existence of Thule were equally the invention of Pytheas; they represented nothing real, although attempts were made in later times to invest Thule with a geographical character; and his statement that he had coasted along the north of Europe from the river Don to Cadiz, shows that his accounts rested not on fact, but on the fanciful errors received in his own day. It can not be considered as certain that he even sailed as far as Britain. Gosselin, indeed, after a careful analysis of the supposed facts reported by Pytheas, comes to the conclusion that he never visited that island, but that he collected either at Gades, or at some other port frequented by the Carthaginians, some vague notions on the northern seas and regions of Europe, and that he passed them off upon his countrymen for his own discoveries.

Herodotus declares that he has no knowledge of the northern river Eridanus, or of the Cassiterid Islands, from which amber and tin were imported into Greece. He believes, nevertheless, that the two articles in question came from the extremities of the earth. These extremities of the earth were, doubtless, the southern shore of the Baltic and Cornwall; from which places the Greeks were supplied with these commodities, through the agency of some intermediate trade. Timæus, the historian, who wrote about 250 B.C., stated that tin was brought from an island within six days' sail of Britain; Polybius knew that tin was produced in the Britannic Islands; and Posidonius, about fifty years after him, stated that it

* See Livy, xl. 21, Mela, ii. 2.

was transported from those islands to Massilia. The most probable supposition is, that Greece and Italy were exclusively supplied with amber by an overland trade, across Central Europe, from the shores of the Baltic to the head of the Adriatic; and that the Britannic tin was for the most part carried across Gaul to Massilia.

Before about the year 700 B.C., the entire carrying trade of the Mediterranean seems to have been in the hands of the Tyrians; and they had, at periods antecedent to authentic history, established colonies at Carthage, Utica, and Gades. The northern coast of Africa was, to a great extent, Phœnician; the coasting voyage from the Nile to the Pillars of Hercules, (which Scylax reckons at seventy-four days,) could therefore be safely performed by a Tyrian merchant vessel. In this manner Tyre was able to carry on a regular trade with Gades and the wealthy Tartessus, the favored region upon the Bœtis; but neither the Phœnicians nor the Carthaginians appear to have advanced their permanent settlements far to the west of Gades; and if their trade to the north did not extend further than their trade to the south, along the western shore of Africa, so far was it from reaching the amber coast of the Baltic, or the tin mines of Cornwall, that it could scarcely have ascended as high as the mouth of the Tagus. The traces of Phœnician establishments on the southern coast of Spain have been carefully collected and investigated by Movers, in his learned work on the Phœnicians: they extend along the whole of the ancient Bœtica, from Murgis to the river Anas or Guadiana: but although Ulysippo, the modern Lisbon, fabled to be the foundation of Ulysses, is conjectured by Movers, on etymological grounds, to have been a Phœnician name, there is no clear historical record of the existence of any Phœnician factory on the western or Lusitanian face of the peninsula.

The enterprise of the Carthaginians, in the way both of colonization and discovery, seems to have been directed rather along the African than along the European shore of the Atlantic. There were many Carthaginian settlements on the western coast of Africa, beginning with Tingis, the modern Tangier; and the Punic mariners had, probably before 300 B.C., become acquainted with some of the Canary Islands. It may, however, be confidently

asserted, that the views of those who, like Heeren, maintain that the Carthaginians sailed to the Prussian coast for amber, and even hint at their having reached America, are opposed both to evidence and probability.

By the expedition of Cæsar the Romans were made acquainted with the northern shores of Gaul, and with Britain, situated at the extremity of the world.* It was Cæsar's boast that he had been not only the invader, but the discoverer, of this remote island. The German ocean was first navigated by Drusus, in 12 B.C.; and in A.D. 4, Tiberius sent a flotilla down the Rhine, with orders to follow the coast eastwards and to sail up the mouth of the Elbe, an operation which was accomplished with success. These waters were, however, considered so distant from the Roman world, that Pedo Albinovanus, a contemporary poet, could represent one of the companions of Drusus as describing the terrors of the voyage in the following terms:

"Quo ferimur? ruit ipse dies, orbemque relictum

Ultima perpetuis claudit natura tenebris.

Anne alio positas ultra sub cardine gentes,

Atque alium libris intactum querimus orbem?

Di revocant, rerumque vetant cognoscere finem

Mortales oculos."

But although Roman discovery at this period advanced as far as the Elbe, it advanced no farther. "Every thing," says Strabo, "beyond the Elbe is unknown;" "and," he adds, in the belief of a continuous northern sea, "no one has navigated along the coast as far as the mouths of the Caspian." At the time of this geographer, however, the Romans had heard of the peninsula of Jutland, which they called the Cimbric Chersonese; and by the time of Pliny they had become acquainted with the Vistula. We learn, indeed, from the same writer, that, during the reign of Nero, a Roman knight was employed to buy amber in the north of Germany; that he reached the northern coast—which must have been the southern coast of the Baltic—by way of Carnuntum, a town on the Danube between the modern Vienna and Presburg, and

* Virgil (*Æn.* viii. 727) speaks of "extremi hominum Morini." The Morini inhabited Northern Gaul, the country where Calais and Boulogne now stand.

that he returned to Rome with a large supply of the article which he was commissioned to purchase.

At this period the Romans likewise heard of the existence of the Scandinavian peninsula; but they conceived it to be a collection of large islands, and not a peninsula; so that by this hypothesis (which seems to have retained its currency for a long time, since even Jornandes, who lived in the sixth century, mentions the island of Scanzia) they were able to reconcile the existence of land in this direction with an open sea reaching to the north of the Caspian.

In this imperfect state of geographical knowledge respecting Central and Northern Europe, it is not likely that the Greeks should have possessed any distinct ideas respecting the population of the countries beyond the Danube and the Alps. The news of the capture of Rome by the Gauls in the year 390 B.C., reached Athens in the form of a story that an army of Hyperboreans had taken a Hellenic city named Rome, situated near the *Great Sea*. All that Herodotus seems to know of the Celts is, that they dwell near the sources of the Danube, that their country is beyond the Pillars of Hercules, and that they lie furthest to the west, with the exception of the Cynetes. Strabo states that Timosthenes and Eratosthenes, both writers on geography about 280–200 B.C., and their predecessors, were without positive information respecting Iberia and Celtica, and still more concerning Germany and Britain. Indeed (he adds) their knowledge of Italy, the Adriatic, the Black Sea, and the regions immediately to the north, was extremely imperfect. The prevailing opinion among the Greeks, until the campaigns of Cæsar had opened Central Europe, was, that the whole region west of Scythia was inhabited by a Celtic population; and it was comprised under the general appellation of Celtica.

The vague and fluctuating language of the ancients respecting the ethnographical relations of Central and Northern Europe, has induced Dr. Holtzmann to question the received opinion as to the Gauls, Germans, and Britons, and to propound, in the treatise named at the head of this article, the theory which we now proceed to state.

The two propositions which he seeks to establish, are—1, that the Germans are

Celts; 2, that the Kymri and the Gaels are not Celts. And he denies the truth of the received propositions—1, that the Germans are not Celts; 2, that the Kymri and the Gaels are Celts. He shows that the writers who treated this subject after the revival of letters, maintained the national identity of the ancient Celts and Germans, and that the now received opinion was first promulgated by Dom Bouquet in 1738. It was adopted by many writers in the last century, but its universal acceptance was (according to Dr. Holtzmann) owing to the passions excited by the wars of the French Revolution and Empire. At that period of mutual aversion, both parties were glad to affirm that Germans and Gauls had always been distinct nations. The finely organized Gallic nation (it was said by the French) had nothing in common with the rough northern barbarians, who first under Ariovistus, afterwards under the Vandal king, Crocus, Chlodio the Frank and others, and, lastly, under Blücher, had devastated the plains of France. On the other hand, the Germans appealed to the description of the people in the *Germania* of Tacitus, and dwelt on the passages of the ancients which spoke of the instability, the frivolity, and the vices of the Gauls. Hence both nations, Dr. Holtzmann thinks, rejoiced in repudiating all community of language and affinity of blood, and gladly adopted the historical theory which coincided with their feelings of animosity. With regard to the Gaels and the Welsh, their national vanity was gratified by a system which represented them as the primitive people of Western Europe, and found in their language etymologies of ancient Gallic words. Dr. Holtzmann considers it as certain that the British races (under which name he includes the Kymri of Wales and Brittany, and the Gaels of Ireland and Scotland) and the Germans are of different national origins. Hence, as he truly says, it follows that if the Germans are Celts, the British races are not Celts.

Dr. Holtzmann begins by laying it down that all Central Europe was inhabited by Celtic tribes, such as the Cimbri and the Teutones, who are expressly called Celts by the ancient writers; and that the belief in large immigrations of Germans from Scandinavia is groundless. He maintains that Scandinavia was a barren and nearly uninhabited country, and

that its reputation of being a cradle of nations is fabulous. Hence he draws the conclusion that if Central Europe was occupied by Celtic tribes, and Scandinavia was nearly uninhabited, no space is left where the Germans could have resided. He next proceeds to collect the testimonies of the ancients, which support the identity of the Germans and the Celts; but these, when correctly interpreted, are in fact mere adoptions and repetitions of the old vague phraseology by which all Central Europe west of Scythia was assigned to the Celts and was called *Celtica*. With regard to the Britons, he shows that their affinity with the Gauls is first affirmed by Tacitus in the *Agricola*; but his attempt to weaken this testimony is not successful. He seeks further to support his views by adducing those statements of the ancients by which similar physical characteristics (such as light hair, blue eyes, and height of body) are attributed to both Celts and Germans, and by pointing out the rude and barbarous state of the Britons, as compared with the more civilized manners of the Gauls. The explanation of Tacitus, that "*Britanni manent, quales Galli fuerunt*," is rejected by him as contrary to probability.

The passages respecting the resemblance of the Gallic and British religions, cause Dr. Holtzmann greater difficulty. The presence of Druids in the island of Mona, (Anglesey,) when it was invaded by the Romans in 61 A.D., is distinctly attested by Tacitus in the 14th book of the *Annale*; but this testimony he removes by a conjectural alteration of the text. Having cleared away this obstacle, he denies the existence of Druids in Britain. The positive testimony of Cæsar that the Druidical discipline was invented in Britain, and introduced from that country into Gaul, and that those who wish to make themselves perfect masters of the system, generally repair to Britain in order to learn it, is again set aside by substituting

Germania for *Britannia*. The resort to such extreme measures in support of a historical theory, must be regarded as presumptive evidence that its state is desperate.*

Dr. Holtzmann concludes his proofs by an investigation of the words preserved from the ancient Celtic tongue, which he identifies with words in the Teutonic languages, and not with Gaelic, Welsh, or Breton forms.

The arguments and conclusions of Dr. Holtzmann are examined and confuted by Dr. Brandes, in the essay whose title we have prefixed to this article. We consider the system of the former as unsound. Whatever may be the inconsistency or obscurity in the language used by the ancients, we can not but think that Cæsar and Tacitus regarded the Gauls and the Germans as forming distinct races, and that both considered the Britons as allied to their Gallic neighbors. Nevertheless, the boldness of his assertions attracts attention, and he will render an useful service to history if, by putting the advocates of the received opinion upon their defense, he causes the evidence respecting the ethnological relations of the Germans, Gauls, and Britons to be examined more critically than heretofore.

We ought, in conclusion, to remind our readers that the critical investigation of the modern Celtic languages was originated by our countryman, Dr. Prichard, twenty-five years ago, whose treatise on the subject, with the addition of a large store of illustrative notes, has recently been republished under the competent editorship of Dr. Latham.

* Mr. C. Merivale, in his recently published volume (vol vi.) of the *History of the Romans under the Empire*, devotes a chapter to the reduction of Britain by Claudius, and the subsequent operations of the Roman officers. In connection with this subject, he mentions the proscription of Druidism in Gaul by this Emperor (Suet. Claud. 25. ;) he recognizes the affinity of the Gallic and British religions, and considers British Druidism to have been extirpated by Suetonius Paullinus, in 61 B.C.

From Colburn's New Monthly Magazine.

MADAME DE MONTMORENCY.*

MADemoiselle DE MONTpensier relates in her *Memoirs*, that the court having rested awhile at Moulins, when on a journey, the King, Louis XIV., Anne of Austria, and the princes, went to the Convent of the Visitation to see a nun, their relative, who had immured herself in that place, and who had suffered so cruelly that she had no wish remaining but to die. This nun was the widow of Marshal Duke of Montmorency, whom Richelieu had beheaded at Toulouse. An Italian by birth, she was born in Rome in 1600, a descendant of that great house of Orsini which gave so many saints, pontiffs, and cardinals to the Church. Niece on her mother's side to Pope Sixte-Quint, she was brought up at Florence, for she also belonged, on the side of her grandmother, to the Medici. The Duke of Bracciano, her father, had distinguished himself in the maritime wars of Tuscany against the Turks and the corsairs, and having retired to Rome, he had wedded there a niece of the Pope, who had by him ten children, seven sons and three daughters. The Grand-Duchess of Tuscany took charge of the education of the latter, and Mary, the youngest of the three, accompanied her sisters at Florence. Mary of Medicis was on the point of leaving for France at the very epoch of her birth, and, wishing to be her godmother, she gave to her her name. In after times, her eldest sister having married the Duke of Gaustalla, and her second sister Prince Borghese, Mary of Medicis felt desirous of establishing her namesake, the youngest, in France, and she asked her hand for Henry of Montmorency.

Mary, who was of a very loving disposition, took greatly to heart being separated from her relatives and the friends of her youth, but Mary of Medicis did all in her power to assuage her grief—gave her a home in the Louvre, and acted towards

her as a mother would have done. Her introduction to De Montmorency was characteristic of the times. When the latter entered into the Queen's apartment, Louis XIII. took the princess by the hand, and presented her to him, saying: Here is my cousin, the illustrious Italian; is she not worthy of you—are you not pleased with her?" The courtly De Montmorency did all in his power to show that he was sensible of the merits of the lady who was presented to him.

"Without being strikingly beautiful (says M. Amédée Renée) Marie des Ursins (Orisini) had the seductions of youth, a fair skin, a rare shape, and the still more powerful charms of a superior nature. Her eyes, of Roman beauty, expressed in their depths reflection and love. Her bearing and her manners alike attested modesty as well as nobility. Brought up in a convent at Florence, she found herself at fourteen years of age thrown into the midst of a world to which she was a stranger, and the intrigues of a most dissipated court: yet did she so conduct herself as to avoid all its shoals. The queen, her aunt, who was not so fortunate, at least knew how to appreciate those merits in her niece, of which she could not set her the example; nay, she was even proud of the credit reflected by her on her family, and she plumed herself on the perfections of her relative. 'Que de vertus j'aime à la fois,' she used to say: 'dans ma niece des Ursins!'"

This amiable and virtuous young princess loved her husband, her marriage with whom had been celebrated at the Louvre by festivals at which almost all the nobility of the country were present, with deep affection—"d'un inconceivable armor," as M. Renée has it. A prelate of austere piety, who knew her well, has left on record "that she loved M. de Montmorency with all the love that one can have in this world, for she never loved another but him. This excessive love was the only thing that could be reproached (le seul désordre) in the life of Madame de Montmorency, for it can not be denied that this great love of the creature was not an obstacle to internal worship." Poor

* *Madame de Montmorency: Mœurs et Caractères au XVII^e Siècle.* Par AMÉDÉE RENÉE.

erring thing ! if she sinned in her chastity and her constancy to her chivalrous husband, what would she have done had she imitated other courtly ladies, beginning at the Queen herself ?

"The object of such devotion appeared to justify it ; to a brilliant exterior, known bravery, and a chivalrous heart, the Duke of Montmorency added the most distinguished qualities ; all his sentiments were allied to grandeur. He still further distinguished himself by a mind more cultivated than that of his peers. The constable, his father, who could not read, and signed his name with difficulty, had made a resolution that his heir should be able to read his own dispatches, and even, in case of necessity, to write them, so that he paid unusual attention to his education ; add to this, Henri IV. had his eyes upon the child whom he loved, and whom he had made his godson. He had given him his name, and called him his son. 'See,' he said one day to his minister Villeroi—'see my son Montmorency, how handsome he is ! If ever the house of Bourbon should fail, there is no family in Europe that would deserve the crown of France so much as his.' "

The precedents of the Duke of Montmorency were not, however, precisely so favorable to matrimonial felicity as might have been hoped for. He could, it would appear, throw off a lady, when it so suited his purposes, with an indifference but too characteristic of the times he lived in.

"Henri IV. wished to marry his godson to one of his natural daughters, but the parents could not agree in the choice ; the constable wished for Mademoiselle de Vendôme ; the King had promised her to the house of Longueville, and he offered in exchange to the Montmorencys Mademoiselle de Verneuil. The old Duke, very obstinate in all matters, would not consent to this compromise ; Henri IV., who had the affair at heart, exiled his *compère*, as he designated the constable, to Chantilly, and kept the youth under his hand. But the obstinate father played him a trick : he secretly negotiated the marriage of his son with an heiress of Brittany, Mademoiselle de Chemillé ; and the matter once concluded, young Montmorency was carried away from the Louvre, and flying with his uncle D'Amville, they made such expedition as not to be overtaken. The King wrote to Plessy-Mornay, governor of Saumur, to arrest them on their passage, but they managed to escape his vigilance. M. de Soubise, dispatched with two companies of light horse to carry off the young lady, met with no better success. 'The marriage was carried into effect, and it is said consummated,' when M. de Soubise arrived. It seemed that there only remained to the King to

put up with it ; but cost what it might, he was determined to have his dear Montmorency for a son-in-law. He offered then to his *compère* Mademoiselle de Vendôme, proposing, at the same time, to indemnify the Longuevilles ; and thus the matter was arranged. Whether the marriage had been consummated or not, the King had it broken under pretext that his godson was not nubile. He was, indeed, only fifteen years of age, but any one would have given him twenty ; and the adventure caused many a smile 'at court.'

No sooner one marriage over and broken, than Montmorency, affianced to Mademoiselle de Vendôme, was about to taste of the pleasures of a second marriage, when the King's death upset the project. It was then that the Queen-regent, desiring for herself an alliance with the same powerful house, married him reluctantly to her niece, Mary Orsini.

Mademoiselle de Chemillé had in the mean time wedded the Duke of Retz, and the marriage of Madame de Montmorency was interrupted by a serious incident, for Montmorency having permitted himself to remark upon his former relations with Mademoiselle de Chemillé in presence of the Duke of Retz in a manner that was any thing but worthy of his gallant and chivalrous character, the Duke called him out, and they fought at the Porte Saint-Antoine, De Montmorency, according to one authority, (Desormeaux,) disarming his antagonist, but according to another,* he was himself disarmed.

A new career was opened for the young Duke, now that he was at last really married. He was sent to take possession of the government of Languedoc, and to visit the different towns of that great province. The Duchess wished to withdraw during his absence to Chantilly, but the Queen would not let her leave the court. The separation lasted for a year, and was the first of Mary's life of incessant cares and anxieties. She, indeed, took her young husband's absence so much to heart, that both the King Louis XIII. and the Queen were affected by it. "We have only the half of Madame de Montmorency with us," the latter used to observe ; "her body is with us, but her mind is in Languedoc." The King himself, thoughtful and silent, used to hide himself in the recess of a window in order to watch his melancholy cousin. Mary

* *Histoire de la Maison de Montmorency.* Par DESORMEAUX. T. iii. p. 191.

* *Vie de Madame de Montmorency.* Par J. C. GARREAU. T. i. p. 47.

Orsini had not learnt French in Italy, and she now set to work at it with all the assiduity that could be inspired by an ardent affection. M. de Montmorency had left her a secretary to facilitate her epistolary correspondence, but the idea of dictating to a woman her letters to a husband! It was too cruel, and it gave to the noble stranger the courage to express herself in French. M. de Montmorency encouraged her, and told her in future to have no other secretary but her own heart. And thus the French language soon became as familiar to her as Italian.

Madame de Montmorency, although so young, was much esteemed at court for her wisdom and prudence, as well as for her modesty. Nor was she even wanting in repartee. As she always wore gloves, the prince, her brother-in-law, tried one day playfully to take them off. She permitted him to do so, but saying, at the same time, that she would not suffer another to do as much. The King having overheard her, said, laughing: "I will take off your gloves, cousin, whenever it shall please me to do so." "Sire," she replied, with a serious look, "I would not permit it." Then, perceiving that the King was annoyed, she added: "Your Majesty knows full well that I would not give him the trouble."

At length the young wife was permitted to join her husband in the south, and so great was her delight at seeing him again, that she fainted away. Her presence added to the already immense popularity of the Duke. Her charity was unbounded, and when she had exhausted her means, she would weep for the distress which she witnessed around her. Although only sixteen years of age, she was placed at the head of the Duke's household, and she had to receive and reply to deputations. The Duke kept up a state even more brilliant than that of royalty itself. His ordinary suite consisted of one hundred gentlemen; he had thirty pages, officers, and guards of all kinds, and livery servants in proportion. It is difficult to form an idea of the hospitality of such a house at those times; it was one continuous festival, the extravagance of which was further enhanced by an unbounded license and a magnificent charity. This "magnificent seigneur" was, in the words of his biographers, "*la providence des lieux où il passait.*"

Madame de Montmorency, young as she

was, felt that such a state of things could not last forever. It would exhaust the revenue of a state. But her attempts at reform were signal failures. Not a man of his household would the Duke dismiss; if the Duchess insisted that such or such a person was useless, he would answer that some day or other a use might be found for him. If the Duchess, by way of example or beginning, dismissed some of her own pages, the Duke would immediately take them into his service.

"Such was this Montmorency, the most magnificent of men! When people expressed their surprise at his bounty, he would reply: 'Oh! that I was an emperor, that I might do more! This fine soul, ever open to sympathy and to generous emotions, was reflected in his manners, and added a chivalrous brilliancy to his beauty. It is related that a Spanish nobleman, the Duke d'Ossuna, passing through Languedoc, paid a visit to the governor. On being shown into his presence, he looked at him some time without speaking; Montmorency, surprised, asked him if he saw any defects in his person. 'Sir,' replied the Spaniard, with gravity, 'what I remark is that nature has made a mistake; for thinking to make a great king of you, it only made a duke.' Contemporaneous writers assure us that he caused a kind of intoxication wherever he went; soldiers followed in his train, and refused to leave him. One day a company that he had dismissed persisted in following him, stopping at all the houses where he stopped. He thought that they wanted bounty, and threw his purse out of the window to them; but they disdained to pick it up, shouting out, at the same time, that it was not money but their general that they wanted. The example of the chief was contagious: Montmorency spread his greatness around and abroad as he did his gold. When any one reproached him with extravagance, he would relate this story of the disinterestedness of his soldiers."

Such is the man as depicted to us by his contemporaries. Noble, chivalrous, brave, hospitable, bounteous, and handsome, he was most undoubtedly a model for a hero of romance; but there was a reverse to the picture. This love of feudal independence and extravagance, this delight in vast numbers of followers and retainers, ill associated with true patriotism or even steadfast loyalty. Then, again, there were corruptions in the heart of this court in the south, in which De Montmorency, following the example of the constable his father—the old Sultan of Languedoc, as he was designated—indulged like those around him, and rendered himself thereby little worthy of the

deep devotion of his young and loving wife. Henry of Montmorency had been brought up in the court of Henri IV.; he had played on the knees of Gabrielle, he had grown up amid those intrigues of a court whose dissipation had only become further corrupted by the Italian favorites of Mary of Medicis. It was not so surprising, then, that he should give himself up to those sensual pleasures which he was never able to entirely cast off.

"The princess finished, alas! by knowing the fact. 'With silence you will come to the end of all things,' she said to a lady who suffered like her; 'such things ought not to be spoken of to any one save God.' She thus kept her grief to herself, but her altered looks betrayed her. 'Are you unwell, dear?' the Duke said to her one day; 'how changed you are!' 'It is true,' she replied, 'that my face is changed, but my heart is not so.' He understood her, and, touched by her resignation, he made vows of reform at her feet which it was not in his power to keep. She loved him, nevertheless, with a most pure and disinterested love; her passion filled her whole soul; love with her was raised to the dignity of a sacrifice, and could live even upon the sentiments of her husband. She did not feel herself utterly abandoned, for she felt that his heart belonged to her in its better impulses, and more than one contemporary assures us that she even experienced a secret sympathy for the women whom the Duke favored. Her own heart impelled her so to do; she saw in her rivals, as it were, a part of herself. Such was the prodigy of her passion."

Sometimes, however, the Duchess, who was much beloved by her attendants, found vindicators where she little expected it. A young Italian of her suite, who sang exquisitely, having won the Duke's regards, she became so haughty in consequence as to forget all respect to her mistress. One day, passing through Lyons, the attendants were about to take advantage of the opportunity to cast the young lady into the Rhône, and would have done so, had not the Duchess herself interfered to save her rival.

Other troubles soon came to add to these domestic afflictions. The life of a great lady of the seventeenth century was not all roses. Religious troubles broke out in Languedoc, and M. de Montmorency was called upon to play an important part. These troubles had their origin in a marriage. The lady of Privas, a Protestant town, where mass had not been performed for sixty years, took it into her head, although a widow, to wed a Roman

Catholic gentleman, to the great scandal of the people, who manifested their annoyance in every possible way. But previous to this incident, which only accidentally brought a latent irritation into open hostilities, the Reformers of Bearn had been in a state of slumbering insurrection. They had been ordered by an edict of council to reestablish the Roman Catholic worship, and to restore its goods. The states of Bearn protested against such an edict, and their resistance found an echo throughout the south. It was at the moment when the war of Thirty Years was breaking out in Germany, and the same spark had lighted up the two countries. France itself was also otherwise disturbed interiorly. Mary of Medicis, imprisoned at Blois, had made her escape, and a levy of bucklers had ensued. The position the Duke and Duchess of Montmorency were placed in was a painful one. They loved and grieved for the Queen who had united them, but their fidelity to the King did not on this occasion permit them to waver. Reason and loyalty came to calm down the impulse of feeling.

These sentiments were perhaps further upheld by the presence of Louis XIII., who came in person to the south to reestablish the Roman Catholic worship. The King laid siege at the onset to Montauban, which was, after La Rochelle, the strongest place in the hands of the Protestants. Montmorency raised a brigade at his own expense, formed it into regiments, and effected a junction with the King, reducing on his way the fortress of Val, where a cannon-ball carried off the feathers from his hat. At Montauban he took the most exposed and perilous position, but plague broke out in the besieging army; the Duke himself was struck down, and the Duchess had to hasten to his bedside, from which he did not rise for weeks. The siege was in consequence raised, and the Duke, on his recovery, went to Toulouse, where he was appointed to the command of the army of Languedoc.

The Protestant cause had lost many gallant leaders, more especially Lesdiguières, Caumont la Force, and Chatillon; but there remained to it the Duke of Rohan, with whom De Montmorency could not for a moment bear comparison. The latter was a brave, chivalrous, rash, and foolhardy captain; the former, a clever, thoughtful, profound, and valiant leader. De Rohan at this time held the

Cévennes. The King laid siege to Montpellier, where Montmorency joined him with his reinforcements. Here, by an act of rashness characteristic of one so preeminently heedless, he received two dangerous wounds, and would, if we are to believe Simon du Cros, (*Vie du Duc de Montmorency*, p. 87-89,) have been killed, had it not been for D'Argencourt, who commanded the Protestant sortie, and who knew him and saved his life. Once more the poor suffering wife was called to the disabled warrior's bedside, and luckily a truce was at the same time brought about among the religious belligerents.

After a brief interval of peace, however, the oppressed Protestants took up arms again, Catholic Spain giving its support to Rohan, whose brother, the Duke of Soubise, issuing forth from La Rochelle, captured the royal fleet in Port Louis. Richelieu sought a remedy to this desperate state of affairs by bribing the English and the Dutch to send a fleet against their co-religionaries. De Montmorency, who held the appointment of Admiral of France as well as that of Commander-in-chief of the army of Languedoc, is described as taking on this occasion a very extraordinary step. Not a single ship remaining to the King of France, he threw himself, with six other gentlemen, into a fishing-boat, and in it sought out during four stormy days the Dutch fleet. Charming the Protestant captains, who had hitherto held aloof from active hostilities, by his "military graces and heroic fascination," he induced them—reinforced by a few English ships—to give Soubise battle, and that with such success that the islands of Ré and Oléron, on which the defense of La Rochelle mainly depended, were forced to surrender. The first incidents of this achievement are not alluded to by other historians, and may, in their details, be justly considered as apocryphal as the other statement of a contemporary, that in the engagement the Dutch Admiral, Houstain, and the other captains who were near him, "were rather his admirers than his counselors, and admitted that the men whom God destines for extraordinary deeds, come into the world with all the knowledge and virtues necessary to their accomplishment." What Montmorency did, is perhaps more characteristically depicted, when it is said that he had the signal made which it is customary to practice when the admiral runs

a-muck, and which consists in exhibiting naked swords to those who can not understand any other hints. Our author tells us, however, that—

"Nothing was spoken of throughout the kingdom, as well as abroad, but of this prodigious feat of arms. Nothing of the kind had ever yet been seen: a great admiral, without a vessel to carry his pennant, putting out to sea in an open boat, pursuing a fleet for four long days, imposing himself as chief on strangers, forcing rigid Protestants to fight against their faith—all this was scarcely credible. He became the idol of gentlemen, the people, and the army; every where the shouts greeted him of 'Vive le grand Montmorency!' Nevertheless as perfect a knight as Bayard, he has not had the good fortune of obtaining so great a reputation; the prestige of his name has been effaced—the admirable fact which we have narrated has been forgotten. It may be said that Richelieu succeeded in decapitating even his glory."

De Montmorency having provided for the safety of his conquests, joined the court at Saint Germain, where he was coolly received. Richelieu exerted himself to the utmost to prevent a man already so popular becoming still more so. It was in vain that the Admiral urged upon the King that La Rochelle, blockaded by the fleet and deprived of the islands whence it drew its subsistence, could no longer resist for any length of time, Richelieu was resolved that so great an accession of honor should not accrue to the Duke. The Minister would not even grant to the victor the government of Ré, and he induced him to relinquish his title of Admiral. The policy of Richelieu, to whom the Bourbons were so much indebted, was to subdue a vassal and too powerful nobility to greater dependence on the crown.

De Montmorency was indemnified in part for the ingratitude of the court by his reception in Languedoc. There the people, who appreciated heroic deeds better than the policy of the statesman, gave to him a triumphal reception. But grievances of a different character awaited him there. The health of the Duchess had broken down under so many trials, and when the Duke arrived at his château of Beaucaire, he found her almost dying. M. de Montmorency's return and presence, however, worked wonders, and she in part regained her health. She had been reduced to such a state of weakness by anxiety for his welfare, that her stomach

refused all food. The Duke, it is said, invented every day some new dish to tempt her appetite; and he carried his attention so far as to dress himself as a fisherman, and bring her back a fish that he had caught, still hanging from the hook.

An event occurred at this time which seems to have been one amongst many that gradually undermined the loyalty of the chivalrous Montmorency. His relative François de Montmorency, Comte de Boutteville, was condemned to death and executed for a duel fought in public on the Place Royale. Edicts had certainly been issued against duelling, but no one had as yet been made to suffer the last penalty of the law for having been engaged in such. The Duke of Montmorency was hence persuaded that it was against his house that this great severity was directed. Yet did he not fail in his allegiance, although tampered with by Rohan when the Protestants, abetted by the English, once more rose up in revolt. He even levied troops in order to intercept Rohan, when that leader projected an assault on the King's troops, at that time laying siege to La Rochelle. For this, however, he only received blame, as he had acted without having received orders, and he was removed from his command of the army of Languedoc, and was replaced by the Prince of Condé. The state of parties may be best judged of at such an epoch by the words of Bassompierre: "Vous verrez que nous serons assez fous pour prendre La Rochelle!" It was, in fact, the interest of the great feudal lords to leave government with such embarrassments in its hands; the weakness of the state constituted their strength.

Montmorency did not, however, cease to wage war against the Protestants because he had been succeeded in the chief command by Condé; on the contrary, he pursued hostilities with greater activity and still more remarkable success, having successively reduced the châteaux of Chomeyras, Du Ponzin, De Mirabel, and others. In the midst of these warlike operations an incident of a different kind occurred:

"Since the death of his beloved cousin Boutteville, the Duke had been given to serious conversations, and his thoughts, even in the tent, often turned upon the mysteries of death and of a future destiny. One evening that he was discussing these subjects with his friends—more particularly in reference to the moment when

the soul escapes from its terrestrial prison—Montmorency and the Marquis de Portes, his relative, swore, that whichever of the two should die first, he should come and bid farewell to the other. A short time afterwards, the Marquis was struck with a musket-shot before Privas and killed on the spot. Montmorency, exhausted with work in the trenches, had just gone to sleep in his tent, when he awoke surprised, and heard, he said, quite distinctly, the voice of his friend bidding him a sorrowful farewell. He thought it was only a dream, the result of a disturbed imagination, and he once more resigned himself to sleep, but the same voice made itself heard, and woke him up again. He then arose, overcome with anxiety, and he dispatched a horseman to the quarter where the Marquis had the command. But at that very moment an officer from the King came into his tent to announce the death of the Marquis. The Duke used often to relate this strange adventure, with which his mind continued to be occupied for a long time after."

No sooner did the Protestant cause suffer a decisive blow by the fall of La Rochelle, than Richelieu removed the field of battle to its traditional country—the north of Italy—where the cisalpine and transalpine nations—mainly represented by France and Austria—have from all times decided their bickerings by force of arms. Richelieu himself took the command of the French, with three marshals of France as his lieutenants. The famous Spinosa commanded in the Milanais. Montmorency was in disgrace. He had in the excitement of his triumphs declared himself to be the Queen's *chevalier*, and had thereby aroused the jealousy of the King; but this did not prevent his serving as a volunteer in the new campaign, accompanied by the *élite* of the south. As to poor Madame de Montmorency, she lay prostrated by her husband's reckless life at the Château de la Grange, near Pezenas.

Richelieu, so astute as a statesman, was not quite so good a soldier, and he managed so badly, that Louis XIII. felt himself obliged to give a command to Montmorency, and the victory of Veillane, followed by the capture of Saluces, once more placed the Duke in the ascendant. Unfortunately, the plague raged amongst the troops; the King himself had contracted a bad fever in Savoy, and leaving the command to D'Effiat, Montmorency hurried away to the bedside of the sick monarch, and at this crisis, to his infinite credit, extended his influence and power to protect his inveterate enemy, the Car-

dinal, who, without such, would, in case of the King's death, have been sacrificed to the fury of the nobles. Louis, however, recovered, and Richelieu regained his old position, in what has been termed the famous "Journée des Dupes." As to Montmorency, at this turn in the state of affairs he went to the south, taking his wife on the way, who was still an invalid, to the waters of Balaruc. On the return of the Duke and Duchess to Paris, the winter was passed in fêtes held in commemoration of Richelieu's restoration to power; and none surpassed in brilliancy those given at the Hôtel de Montmorency. As the poet Théophile had sung "*La Maison de Sylvie*" (the Duchess under the name of Sylvia, at Chantilly,) so now Mairet had to tune his lyre in praise of "*Alcide et Sylvie*."

With summer, the Duke and Duchess returned to Chantilly, which both took equal delight in embellishing. The Duchess had now a moment's enjoyment of life in the company of her husband.

"The Duke talked of resting there awhile, and of withdrawing from the court and active life in this calm and delicious retreat. He also had extensive repairs carried on at the Hôtel de Montmorency. He appointed governors to the different towns of Languedoc, to preserve order during his absence, and he went so far as to promise the Duchess that his longest journeys would for the future be from Paris to Chantilly. When she was languishing in expectation of his presence, her chief happiness consisted in preparing for his return those magnificent garments, which he wore with so much grace and so great an air; doublets of Spanish cloth or of velvet with open sleeves, the long feathers that decorated his hat of felt, the scarfs with embroidered devices, and collars of Flanders lace, not to mention the fine lace that also trimmed the top of his boots. Indifferent in the matter of her own adornment, she had taken the finest diamonds from her jewel-case in order to decorate with them the order of marshal. As to the suit of armor—which bore the marks of many a combat—the helmet and its plume, the breast-plate, the brassets or arm-pieces, and the gauntlets, they now hung up in the guard-room, and the Duchess hoped to see them remain their for a long time. She gave herself up to these delightful dreams with a joy that almost savored of intoxication; but events soon occurred which called the Duke away."

The province of Languedoc, although attached to the crown for near four centuries, still preserved its privileges, its local franchises and an administration almost independent of the state. Such a

condition of things ill assorted with the ideas of Richelieu, and he issued a royal edict suppressing these privileges; the consequence of which, in a country scarcely yet settled down from a war of religion, was the revival of animosities and insurrection. Montmorency was called upon at such a crisis to preserve order in his government. He accordingly went to Languedoc, but in a state of great personal irritation against both the King and his Minister. The former had banished him awhile from court on account of a duel he had fought with the Duke of Chevreuse, in the court-yard of the Château de Monceaux, whilst Richelieu had shielded the Duke from the King's justice; his own prerogatives were also affected by the proposed subversion of the old order of things in his province; and, worse than all, Richelieu set his old rival, D'Effiat, to annoy him by large pecuniary demands on account of his government.

It was at a moment when so many grievances had combined to irritate the Duke against the King and his haughty minister, that Gaston, the King's brother, for a third time left the country, and joining the Spainards, at that time in the Low Countries, launched a violent manifesto against the Cardinal. He at the same time dispatched an emissary, the Abbé d'Elbène, to the Duke of Montmorency. The Duke hesitated for a long time before he cast the die in allying his fortunes to those of Gaston; but when the latter, defeated in Lorraine, and driven by La Force and Schomberg out of Burgundy and the Bourbonnais, sought refuge in Languedoc, the chivalrous Montmorency armed in his favor, and got the states to join in the rebellion. The insurrection, however, confined to Languedoc and placed between two armies, did not embrace all the towns: Montmorency failed before the most important; Montpellier, Nîmes, Beaucaire, Narbonne, held out for the King. The gallant De l'Estrange had been captured in the Cévennes, and decapitated. Discord reigned in the camp of Gaston, and the Duke attempted to negotiate with Richelieu. The Minister had, however, now caught his powerful enemy in a trap, and was not the man to let him escape. The Duke of Montmorency was in open rebellion, and he would hold no compromise with him. Nothing remained, then, but to fight. The decisive contest took place near Castelnaudary.

Montmorency rushed madly into the ranks of Schomberg's close battalions, and his horse falling and himself wounded, he lay in his heavy armor incapable of raising himself, and unsupported by the troops of Gaston. On being at length carried away a prisoner to the Marshal's tent, and his armor removed—for he was nearly suffocated by the blood that flowed alike from his mouth and wounds—the portrait of Anne of Austria was found attached to his arm by a bracelet of diamonds. Montmorency had received seventeen wounds, five balls had remained in his body, and one had nearly severed his throat. He was not expected to live, and he was removed by the troops to Castelnaudary on a ladder covered with cloaks, the bearers weeping as if they had been attending a funeral. Thence he was taken in a litter, against the protestations of his surgeon, to the Château de Lectoure. Richelieu, who had arrived with the King at Lyons, dreaded nothing so much as that his prisoner should be carried away from him. He was preparing his master's mind for a tragic conclusion to the affair, and no argument that he used was so strong as that unfortunate discovery of the portrait. Yet was the Cardinal himself more jealous than the King, for he also had aspired to the favors of Anne of Austria.

A council was assembled, and the inquiry was so long that de Montmorency had got sufficiently well to rise up to receive the Marquis de Brèze, brother-in-law of Cardinal Richelieu, when that gentlemen came to remove him to Toulouse. He was perfectly prepared for his fate; he knew that to be put on trial was equivalent to a condemnation to death. He was conducted through the streets of Toulouse in a close carriage, surrounded by mousquetaires on foot and on horse, with a double row of Swiss, besides eight squadrons of light horse. The intervention of the most of the nobility of the country—of even Charles I. of England—was of no avail. His enemies were too powerful, and too deeply bent on his ruin.

"The day of his execution, the 30th of October, the Marshal woke at seven o'clock in the morning after a quiet night's rest. His surgeon presented himself as usual to dress his wounds. 'The hour is come,' he said, 'to cure all these wounds by one.' He took the scissors out of the surgeon's hands, and himself cut off

his long moustaches, handing them over to a priest to be burnt as a last vanity of this world.

"The Comte de Charlus then presented himself to conduct him to the scaffold. He was dressed as on the previous evening, in a white jacket, and he now cast over his shoulders a soldier's cloak of coarse cloth. He was first led to the chapel to hear the verdict. 'I thank you,' he said to the magistrates; 'I pray you assure all those of your company that I hold this verdict of the King's justice as a manifestation of God's clemency.' He was then handed over to the grand provost. The verdict ordered that the execution should be carried out on the Place de Salin; but, whether out of consideration for the Duke, or for motives of prudence, seeing the excitement that prevailed, the King allowed the scaffold to be erected in the interior court of the Capitole. This court, of limited dimensions, was filled with soldiers, charged to superintend the preparations for the execution. The men of justice and the 'capitouls' occupied the windows around, dressed in their ceremonial red cloaks. There was a statue of Henri IV. in the court which rose to the same height as the scaffold—that is to say, to the height of the first story—and the Duke, remaining on his entrance with his eyes fixed on the statue, the minister in attendance asked him if he wished for any thing? 'No, father,' he replied; 'I was looking at the statue of Henri IV.; he was a great and generous prince; I had the honor to be his godson.' He was advancing towards the scaffold when a last attempt to save his life was made: the lieutenant of the guards, De Launay, once more wended his way to the palace. In the interval the Marshal-duke sat down on a bench in the court, near a balustrade, and conversed in a low voice with his confessor. His last words were: 'What do I feel within myself, father? I can assure you before God, to whom I am about to answer, that I never went to a ball, nor to a feast, nor to battle, with greater satisfaction than I go to die. Promise me, father, that you will say nothing of this, for fear that it is thought that there is some vanity in it, which there is not; I only mention it to you for my comfort and for yours.'

"After a moment of terrible anxiety for all present, the messenger reappeared, and it was seen on his face that there was nothing to hope for. The executioner had then 'main levée,' and the Duke walked with a firm step to the scaffold. He assisted the executioner in baring his neck and shoulders, and presented his naked arms to be tied; he begged one of the priests on his ascent to see that his head did not bound off to the ground, but to prevent its doing so if it was possible; his friends say that nothing horrified him so much as to see the head of a person roll from off the scaffold. Once upon the scaffold, he kneeled down, made no further observation, but kissing the crucifix, and recommending himself to the prayers of the ministers, he placed his head on the block.

But finding this too low and badly fixed, he rose up again, and assumed another position. A groan of pain that he uttered, drawn from him by the wound in his throat, staid the arm of the executioner. He called out to him not to strike, and then he rose again and tried another position. This time he stretched out his arms, and, recommending his soul, his head fell near the block, as he had wished. His blood spurted out upon the statue of Henri IV., and if tradition is to be believed, left its traces there for a long time afterwards."

All this time the unfortunate Duchess could not approach her husband. Struck down by sickness at Béziers, when she was first informed of his having been made prisoner, she fainted away. When she came to herself, she at once sent off, ill as she was, her own medical man and her squire to bring back intelligence as to how he was. They found him at Villefranche, and the wounded man said to the squire: "Tell my wife the number and size of the wounds you have seen, and then assure her that that which I have made in her heart is far more painful to me than all the others."

Madame de Montmorency, although so reduced by care and sickness, roused herself, and made desperate efforts to save her husband. She wrote to all his relations, persuaded Gaston not to go over to Spain, caused many fortresses that were in the hands of her friends to be given up to the King, and asked permission to throw herself at his Majesty's feet; but it was all in vain. After the fearful tragedy had been enacted, commissioners presented themselves at the Château de la Grange to seize her goods, and to order her to quit Languedoc for Moulins, La Fère, or Montargis. She offered no resistance, nay, was totally indifferent to the act of spoliation and as to where she was to go; she said to Moulins to be near her husband's remains. She was so ill that she had to travel by short journeys, and so poor that she had to sell her carriage horses to enable her to finish her journey.

All she wished for was death as a relief to her sufferings. She was imprisoned at first in an old feudal castle that was falling into ruins. One day she saw a snake come forth from a crevice in the walls of her room, and glide towards her. A sudden gladness filled her soul; she held

out her arm towards it, but an attendant coming in at the time frightened the reptile, which fled away, the Duchess watching it with a look of grievous despair.

After two years' captivity, she was allowed to retire from the world in the convent of the Visitation at Moulins, where we found her at the commencement of this article. Here she devoted what remained to her of her worldly goods to enlarging and improving the convent, and to the construction of a monument to the memory of her husband. She received visits from Louis XIII. and Gaston, and afterwards from Louis XIV., from the widow of Charles I., and from Christina of Sweden. She lived to hear of the death of the implacable enemy of her husband—Cardinal Richelieu—and she ultimately sank into an eternal rest in perfect odor of sanctity. "Of all women," says her biographer, "who have earned celebrity by their devotion and love, none can surpass the widow of Montmorency; her virtue had no shady side, and was entombed in her perfection."

Sketches like these of a by-gone epoch and of an extinguished race of men and women, are not without their utility as well as their picturesque and romantic interest. M. de Montmorency, among the last of the great feudal vassals of the crown, was not the last of those who represented the "esprit gentilhomme" of a past generation, but he was among the last with whom, despite his faults and errors, which were as much those of the times he lived in as his own, that chivalrous spirit attained its highest perfection. Without going so far as a Capestigue, who would have us ever regret the loss of the gallant gentleman who would go to battle in laced frills and scented kerchiefs, still it is impossible not to feel that they were a far more cultivated, more delicate-minded, and high-principled race than their descendants—the Montmorencys, the Liencourts, the Périgords, the Lafayettes, the Noailles, the Rochambeaus, and the Birones, who scratched their very escutcheons in times of revolution, adopted their family cognomens, Bouchard, Motier, and Guy, and "committed a stupid suicide which did not even profit to their pride."

From Colburn's New Monthly.

THE IMPROVISATRICE;*

OR, THE ITALIAN BANDIT'S BEAUTIFUL DAUGHTER.

THE Italian tourist of the earlier part of this century doubtless still preserves a vivid recollection of the predatory habits familiar to some portion of the inhabitants of classic Italy, and of the time when it was an act of heroism, if not of insane foolhardiness, to travel without a strong escort through many of its loveliest scenes.

Not alone in Southern Italy, in the ill-governed States of the Church, and among the lawless semi-barbarians of Calabria; not alone amidst the deep solitudes of the Apennines, but even where civilization was more dominant, and where security should have been better established, had rapine fixed its strongholds. In the Venetian territories, at no very great distance from the beautiful and picturesque Lago di Garda, a troop of brigands had established their head-quarters, having found a safe retreat amidst that chain of the Alps which terminates near Chiusa. By these bandits many an unsuspecting traveler was adroitly eased of his luggage; and in some cases, especially if the robbers met with ineffectual resistance, scenes of violence were enacted. Yet a kind of wild generosity, a degree of cour-

teous bearing, not unfrequently characterized these daring outlaws; and rumor said, that this shadow of chivalric conduct was attributable to one of their chiefs, who was infinitely less ferocious than the desperate gang over whom he had found the means of acquiring influence.

Leonardo, or Il Leone—the Lion, as he was generally called—had not always followed such degrading courses. He was the younger son of an Italian nobleman; he had received a good education, and he had, at one time, mixed in good society. But his mind not having been imbued with those religious principles which alone can give strength to withstand the allurements of vice, he fell into evil habits, gambled away his small inheritance, and, having wound up his reckless career by entering into a political conspiracy against the government, was obliged to fly from the neighborhood of his paternal home, and to seek elsewhere the means of subsistence. It was at this juncture that, in a measure compelled by necessity, he sought concealment and shelter among the robber-band, who eventually elected him as one of their leaders; for even in that wild community talents and education commanded respect.

Time rolled on, and it may be that Il Leone would have pined to return to civilized society, and to exchange his almost savage freedom for the forgotten advantages and pleasures which he had once enjoyed, had not a softer tie than that of fealty to his adventurous companions thrown its charm around his heart. He had seen, admired, and, with her own consent, carried off and married a beautiful peasant girl; and to embellish her mountain dwelling, to protect her from danger, and to cheer her solitude, now became the principal objects of his existence, although he did not relinquish

* "We should convey an exceedingly imperfect idea of the poetry of Italy, did we omit to say a few words of the *Improvvisatori*. Their talent, their inspiration, and the enthusiasm which they excite, are all most illustrative of the national character. In them we perceive how truly poetry is the immediate language of the soul, and the imagination. . . . The talent of an improvisatore is the gift of nature, and a talent which has frequently no relation to the other faculties. The improvisatore generally begs from the audience a subject for his verse. After having been informed of this subject, he remains a moment in meditation, to view it in its different lights, and to shape out the plan of the little poem he is about to compose. His eyes wander around, his features glow, and he struggles with the spirit which seems to animate him."—*Literature of the South of Europe*. By J. C. L. SIMONDE DE SISMONDI.

the wretched profession which circumstances, or, as *he* said, "fate," had driven him to follow.

But, as if Providence had determined to punish him for his evil deeds, the one ewe-lamb, the being whom he loved so much, was snatched from him by death, and Leonardo was left with one motherless child, a lovely little girl of about three years of age. The innocent Ninetta was a favorite with the whole rude community; the rough men, the coarse-minded women, the hardy, sun-burnt children, all loved *her*; and she looked among them like a little cherub who had strayed from her home in the skies, or had been sent on a mission of celestial love to mollify the iron hearts around her.

Il Leone devoted his spare time to the education of his daughter, who proved to be an extremely clever, intelligent child. He taught her to read and write, and to play on a guitar, of which one of the bandits had robbed an unwary traveler as a present for the little favorite. He recited to her passages from the best poets of Italy; from Tasso, Ariosto, Petrarca, and Metastasio; he related to her anecdotes and incidents from the histories of Greece and Rome, and from the scarcely less stirring annals of the early republics and petty sovereignties of her own romantic country; but that far more essential knowledge which is to be learned from the Holy Scriptures he did *not* impart to her, probably because he was ignorant of it himself. Did the opening floweret then grow up into a noxious weed? No; happily it was not so ordained.

One day, when Ninetta was about nine years of age, she had followed a pet goat, and with this companion had rambled to a great distance beyond her accustomed haunts; up hill and down dale, from crag to crag, the little mountaineer pursued her roving guide, till at last a tract of country burst on her view which she had never before beheld, and almost at the same moment she perceived, by the length of her own shadow, that day was on the decline. The goat was still skipping onwards, now browsing on the short grass which grew in patches here and there, now sniffing the mountain breeze, and bounding in joyous liberty from one projecting ledge of rock to another, regardless of the silver voice of its young mistress, whose clear, bell-like tones, repeated

by the echo of the hills, in vain called it to return.

"What shall I do?" said the little girl to herself; "it will soon become dark, and how am I to find my way home? Ah! naughty goat, to lead me so far! And what if there should be wolves prowling about!"

Fear and fatigue overcame poor Ninetta, and she sank down in hopeless lassitude on a mossy stone. At length a thought struck her. "I will sing—sing very loud—and perhaps some traveler by these mountain paths may hear me, and come to my aid."

She sang accordingly, and her liquid notes, floating on the evening breeze, *did* reach the ear of a kind-hearted being, who hastened in the direction of the voice. The person who heard her was Father Anselmo, a pious hermit, who had taken up his abode amidst the solitude of these lonely hills. Ninetta was looking round wistfully to see if she could discern any human creature approaching, when her eye fell on the figure of the hermit, just as he emerged from a projecting rock near her. His pale countenance and emaciated features, his thin, almost transparent hand, and the dark-gray cloak floating around him, almost the hue of the rock from which he seemed to her fancy to have issued, gave him quite an unearthly appearance, and, with a cry of terror, Ninetta hid her face in her lap.

The child had often heard, among the bandits' wives, tales of ghosts, and hobgoblins, and evil spirits who haunted lonely spots, and one of these immaterial beings she imagined the form at her side to be. But Father Anselmo, gently placing his hand on her head, and with kind words quieting her fears, led her to his hermitage, and giving her some bread and fruit, promised to show her the way towards her home.

"Rest here awhile, however," he said, "until the moon rises, and then you will pass more safely across the shorter sheep-track, by which I will take you."

The hermit lighted a lamp, for it was almost dark in the sort of cave or recess in the rocks which formed his cell, and, after gazing for a few moments on the interesting countenance of the little girl, he began to question her respecting her religious knowledge. Alas! on this subject crude and vague indeed were the child's

ideas. She knew there was a God who had made the hills and lakes, the trees and flowers she loved so much; she had heard of the Virgin Mary, and of three or four saints who were patronized by the banditti and their wives; and she entertained for a little ebony cross, which was suspended by a ribbon round her neck, a sort of innate reverence, because her mother had kissed it when dying, and because she had been told it was a symbol of something very holy; but all else was chaos in her young mind. Father Anselmo showed her a picture in which the infant Jesus was represented, spoke to her of his mission to this world, his career on earth, and his ascension to heaven; and told her of the resurrection of the dead, and of the life to come. Ninetta listened with wonder and delight; she drank in eagerly the hermit's words, and when, at length, she parted from her venerable guide, who had accompanied her to within a short distance of her home, she gladly accepted his invitation to visit him again. Often and often afterwards did she trip over the now familiar path to the solitary abode of her kind instructor, nor did Leonardo forbid these visits, for the retreat of the aged hermit was well known to the bandits, who never thought of molesting him.

But if Anselmo's lessons made Ninetta wiser, they also caused her much anxiety, for the truth was now apparent to her that her father and his companions were leading lives opposed to the laws of God and man. She grieved deeply for this, and as she grew older she became more intensely solicitous to withdraw her parent from his guilty associates and his own evil courses. Many were the consultations she held with the benevolent hermit on this subject; but her plans and wishes were alike vain, until a higher power was graciously pleased to interpose on her behalf.

One day a terrible storm broke out, the thunder rolled, and the lightning glared. It happened that Il Leone was returning from a predatory expedition with some of his band, when a fearful flash of lightning struck himself and one of his followers to the ground. For a few moments he lay, as it were, stunned, and when at length he slowly arose, all was dark around him. He had been struck blind by the same flash which had instantaneously deprived his companion of life.

Of what use could their blind chief be to the reckless banditti? His vigor of mind seemed to have fled with his sight. He was no longer the boldest in planning enterprises, the most daring in executing them; and at length, having become a burden to his companions, he lent a willing ear to his daughter's entreaties that they should go to some place where, by her industry, she might maintain him and herself. The youthful and inexperienced Ninetta little dreamed of the difficulties she might have to encounter; but even had she known them, her sense of duty, and the energy of her mind, would have induced her to try to overcome them. At this period Father Anselmo was of much use to Leonardo and his daughter. He advised them to go to Verona, where there was but little chance of Leonardo's being recognized, especially as his hair, since the lightning-stroke which had deprived him of sight, had gradually but rapidly become gray; and premature old age seemed to have crept alike over his body and his mind. For Ninetta's sake, the hermit gave them a letter to a respectable elderly female who resided in the suburbs of Verona, and who had been at one time a confidential servant in his sister's family; and as the bandits had not been so ungenerous as to let their former chief go from them in a state of destitution, Leonardo was able to pay for their humble lodgings in her quiet cottage on the banks of the Adige.

From the good old dame with whom she now resided, Ninetta speedily acquired some knowledge of those little feminine arts so useful in domestic life. But it was necessary to adopt some means of gaining a livelihood when their store should be exhausted. Ninetta bethought her of weaving baskets, in which occupation she could teach her father to assist her, and of selling them, together with flowers, in the streets of Verona. She succeeded beyond her utmost expectations. Few persons passed the beautiful flower-girl, leading her blind father carefully along, without purchasing a nosegay from her; and if at times the flower trade became dull, Ninetta found that to strike a few chords on her guitar, and to sing some of her wild mountain airs, never failed to attract a crowd around her, and to fill her father's hat with small coins. As she grew older her genius ripened, and she became noticed also as an *impro-*

visatrice. She never, however, forgot the lessons which she had received from her friend the hermit Anselmo; and it was her custom, as soon as she had gathered her flowers at early morn, to repair to the church of San Giorgio, generally accompanied by her father, who never seemed to be happy away from her, and there to spend some time in devotion before commencing the business of the day.

One morning, while she was kneeling in her accustomed place, and deeply engaged in prayer, a young man, tall in stature, and with a noble countenance, entered the church. While looking around for the picture of the martyrdom of Saint George, by Paul Veronese, which adorns that edifice, his eye fell upon the flower-girl and her father. What picture could be finer? The gray-headed old man stood leaning on his staff, his sightless eyeballs being raised to heaven; while at his feet knelt the beautiful and graceful girl, her dark ringlets escaping from beneath her simple head-dress, her hands clasped together, and her coral lips moving in earnest prayer. For a few moments the young man stood gazing upon them; then, seizing his pencil and tablets, he began to make a rapid sketch of the group. He had just caught the attitudes and outlines of the figures when Ninetta arose from her knees, and, turning to take up her basket of flowers from the marble floor, perceived the young artist, and encountered his earnest gaze. She started, and the stranger, approaching her, apologized in a low tone for the liberty he had taken, and at the same time begged a single rose-bud from her basket. In some confusion, Ninetta selected for him the finest rose and a sprig of myrtle; and then, taking her father's hand, she led him out of the church.

The stranger's first impulse was to follow her; his next thought was to ask the old sacristan, who was loitering about the aisles, if he knew any thing of her.

"Only," said the old man, "that she goes by the name of Ninetta, the Flower-girl and Improvisatrice. She lives somewhere in the suburbs, on the banks of the Adige. She sings charmingly, but no one can find out her history, or that of the blind man whom she calls her father."

"Where shall I be most likely to meet with her?" asked Ernesto.

"Well, when she has sold her flowers, or her baskets, she occasionally sings of an

evening, and her favorite stations are near the old Amphitheater,* or by the Porta dei Borsari."†

"At what hour?"

"Why, generally about sunset."

Long before the sun had set, Ernesto had paced at least a dozen times between the arch and the Amphitheater; then, hoping to meet on the way the fair subject of his morning's sketch, he started off towards the Adige. At length, being disappointed, he returned towards the Porta dei Borsari, and perceiving that a crowd had gathered near it, he hastened onwards. Presently he heard the sound of a guitar, and a melodious voice humming, rather than singing, an air to it. Advancing a few steps farther, he beheld her he sought standing on a slight elevation, her father reclining near her. Ninetta saw him, and colored, she knew not why, while he bowed respectfully to her.

"A subject—who will give a subject?" cried some one in the crowd. "La Ninetta seems inspired this evening."

"I will," said Ernesto. "I give—LOVE!"

Ninetta's cheek grew pale, but her eyes sparkled like the diamond dew-drop on the flower at early morn, as striking a few chords on her guitar, she half-sung, half-recited, the following lines:

"Love's like the desert-fountain, playing
'Midst wastes — where the lone pilgrim's
straying—
Refreshing all, where'er 'tis found,
Till Eden seems to bloom around.
Love's like the faithful Polar star,
Guiding the wanderer from afar.
Ask ye—where is the home of Love?
The minstrel bids ye look—above!"

And the improvisatrice raised her slender finger, and smiling, pointed to the bright skies, now rich in the brilliant tints of an Italian sunset. "The lightning of that angel smile," much more than the impromptu lines she had just chanted, gained a tumult of applause from the bystanders, one of whom, however, as if in derision or jest, asked her to sing something about *inconstant love*, that being more common than the sentiment she had just portrayed. Preluding for one mo-

* Supposed to have been erected during the reign of Trajan. It is almost perfect, and is composed of large blocks of marble without cement.

† A triumphal arch, erected in the reign of Gallienus.

ment on her guitar, Ninetta exclaimed, in a kind of recitative:

"Tis like the rainbow's vivid hue—
Bright—beautiful—but quickly past;
Or, like the calm sea's sparkling blue,
By every fleeting cloud o'ercast!"

"Brava! Brava!" exclaimed several voices; but a prosaic-looking stout burgher cried: "Let us have something better worth hearing than nonsense about love and rainbows; give us a stave about our own good town, Verona!"

"Ah! that is a dull theme; but you can not puzzle La Ninetta," said one of her admirers, as Ninetta, gazing for a moment on the triumphal arch near, and casting a rapid glance over the old city, sang:

"Amidst the richest of Italia's plains,
In beauty clad, our old Verona stands;
The halo of antiquity that reigns
Around its walls—still deep respect commands.

"Twas here that Pliny saw the light of day;
'Twas here Catullus sung—here Romeo died,
The victim of his love——"

"At *love* again!" exclaimed the fat burgher, interrupting the improvisatrice; "I did not bargain for that, but girls' heads are always running on love and folly."

"Nay, amico mio," cried an old man, who was standing near him, "you should not chide La Ninetta thus, because you have forgotten your own youthful days. Bella cantatrice," he added, turning towards the fair musician, "try *THE MOEN OF LIFE*; *that* subject will please every body."

"The morn of life?" said Ninetta; "ah! how can I do justice to that theme? But I will try it.

"Where shall we seek the softest bloom?
On childhood's rosy dimpled cheek;

That cheek which brightest smiles illumine,
The smiles which innocence bespeak.

"And where, on earth, dwell hope and truth?
In childhood's uncorrupted heart;
Alas! too soon to guileless youth
The world doth its dark code impart!"

"Ah! then, before the opening mind
Become the prey of human strife,
While yet to earthly evil blind,
Blessed be the happy *Morn of Life*!"

"And now good night! felicissima notte!" cried Ninetta, drawing the string of her guitar tighter over her shoulder, and holding out her hand to raise her blind father. The crowd, on this, began to disperse; and in a few minutes more Ninetta was leading Leonardo towards their humble home. But the father and daughter were not, as usual, alone: Ernesto had joined them, and had begged leave to follow them, in order to finish his sketch. Ninetta felt a strong desire to have a likeness of her father, and as Ernesto promised to paint one for her, she obtained the old man's permission that he should accompany them to their cottage.

Need we say that his first visit was not also his last? Again and again he went to the cottage on the Adige. At dawn of day he was waiting to assist Ninetta in gathering her flowers for sale; he taught her to paint; he read to Leonardo; in short, he became as one of themselves. In process of time, Ninetta, the bandit's daughter, became the wife of the rising young artist, and fulfilled all the duties of her new position as faithfully and affectionately as she had fulfilled those which had devolved upon her as a daughter.

Her father died peacefully—a penitent man; and though her rich voice was no more heard near the Porta dei Borsari, nor her light figure seen tripping along with her basket of roses on her arm, it was long before the citizens of Verona forgot Ninetta, the Flower-girl and Improvisatrice.

From Talf's Magazine.

LEOLINE; OR, THE OBJECT OF GUARDIAN ANGELS.

IN a wild and dreary scene, which the rude wind made to seem more dreary still; for he raised his screeching voice and howled and roared, and then fled shrieking as if from his own turmoil; a crazy, lumbering old caravan sulkily dragged along the road and over the broken ground. A rut of greater depth than usual caused a heavy lounge to one side and threatened dislocation to the rickety vehicle; but it recovered its equilibrium, and amidst the curses of the driver, and the renewed screams of the wind, which seemed to have come back to look on the disaster, held on its way. At length it stopped, and a woman put her head out of the doorway and surveyed the scene around. "Tis bitter cold, and bleak, and drear," she said; "yet how the wind gambols 'mid the leaves, and then chases leaves and twigs and all before him as he madly flies to yon black and gloomy hills, there to sing the requiem of himself and all else born to turmoil!"

There was a discrepancy between her tattered garb and the education of her words; but as her eyes, of almost superhuman brightness, glared into the distance whither in fancy the wind had already fled, she continued: "It is a foul and faulty life; now here, now there, wandering—wandering, from day to day, month to month, year to year—no rest, no hope of rest—on earth, at least—and the hereafter!—ay, there lies the darkest spot of all."

"Curses on your ceaseless growlings," and the man, her companion, for one moment stopped in unharnessing the horse to scowl on her. Curses on your ceaseless howlings; you'd scare away the little of life that is left in a man. In the devil's name, or that of any one of his ten thousand votaries, take to the bottle to stop these mummeries; or, on the life of me, I'll stop them as I stopped others long since." She shuddered for a moment as he continued his occupations and busied himself about the horse. "There," he said, "as he let the animal loose, and

bestowed a blow upon the flank; "there—off with you, and get thy fill of the brown heather. Drink, brute; thou hast the better lot of all, methinks." He threw himself down on the turf and lit his pipe. The evening deepened round him. Night came at last, and from her robe the diamond stars peeped out one by one; and the moon, naught but a silver line of crescent light, rose and glided through them in her appointed course.

"Herman!" the woman called, and put her head from the caravan. "Herman, do you spend the night thus? Come to the shelter, which will keep the cold dews of earth from racking thy limbs with rheumatism. Come, Herman, come." She came from the caravan and stood beside him. The wind blew aside her tattered garb, and played in the tangled masses of her uncombed hair; it cooled her heated brow, but the burning heat was not only skin deep; there was a fire raging in that brain which no mortal breath or earthly breeze could quench.

She knelt down beside him whom she called Herman, and in whispered words repeated her entreaties for him to return to the caravan. He continued obdurate, scowling at her in sullen wrath.

"Hence to you, puling drab," he cried, "hence to the milk-faced offspring of the scoffing noble. Ay, woman, you may tremble at the mention of him, at the memory of him, and all concerning him. Yet 'tis a thought that must and shall be borne; better meet it familiarly, and by familiarity gain indifference."

"Better forget, Herman, if forgetfulness there be for such a thought."

He turned sharply round and looked at her.

"If?" he said, in answer to her words. "If? 'Fore heaven and earth, thy words and actions are at strange battle with each other. Thou wouldst obtain forgetfulness, if such exists for such a thought; yet thou dost woo, nourish, feed that which destroys the very boon thou wouldst obtain; thou wilt have yonder

sickly child ever in thy sight, holding up the mirror of by-gone days, and bidding thee gaze in it. How canst *thou* wish forgetfulness when thou dost thus wantonly drive it from thee? Thou must be naught but a fool—a miserable fool—acting like one who longs for sunshine, and seeks it 'neath the deadly shade of the wide-spreading upas tree." He rose, and as he spoke wandered from her. She followed him, and quickening her steps, stood before him in his path.

"Herman—husband, friend, and foe—speak boldly, and say what thou wouldst have. I weary of thy hints, thy discontented words, thy jealousy, for it comes to that, of a poor helpless babe. Speak to me, who has a heart perhaps as valiant as thine own."

"As valiant as mine own!" A mocking sneer came on his face. "Then, by my troth, is mine own heart a coward to the core. As valiant! Poor wretch, to hug thyself in that delusion! Why, as I watch thee on thy restless slumbers, and mark the starts and muttered words, and grinding of the teeth, and all the other signs which speak of a fevered conscience, I wonder at the weakness of the soul, or spirit, or what it may be, which keeps the human frame agoing, yet can not meet unshrinkingly the empty shadow of unsubstantial thought."

She clung to his arm, for they had entered into the somber shelter of a great and gloomy wood, where owls screamed in the darkness, and bats whirled through the air, and mice ran their mad gambols on the decaying carpet of falling leaves.

"Herman, that which thou dost call unsubstantial becomes tangible and real to me; for, in my slumbers imps of darkest form and foul malevolence keep up their nightly dances round my bed, pluck at my flesh with pincers, drag my sinews from their lair, rack my racked nerves; and when I would escape, slumber stands their helper, and lulls me to their power again; once more to their torment, then comes the former course; then torment, then slumber once more. So do I pass through night, and now dost thou wonder at my starts and other signs of woe?" He laughed—a loud, sardonic laugh; and an echo caught it up; and another and another, till Elfried (so was the woman named) forgot its birth, and bestowed on it for parentage her tormentors of the night.

"Hist!" she cried; "hist! they are now abroad—this is their hour; didst thou not hear the loud and mocking chorus of their mirth—as of ten myriad dying voices—loud at first, and then gone in the distance?"

"Fool!" was his rejoinder; "thy fear begets its children; 'twas I who laughed at thy most foolish picture of the fancied terrors of the night. And now my merriment, shared by the very rocks and hills at thy expense, must conjure up fresh goblins to thy brain. But thou hast lost the question. I said thou wouldst have forgetfulness of the past, and of that belonging to the past. Murder—nay, shrink not, coward!—'tis the word which names the act; whisper it to thyself—shout it aloud, for none will hear it—none, save the bats and birds and vermin—and they tell no tales. So, out with the frightening word. Nay, by my soul, if thou dost show such senseless terror, I will brain thee with this stone. There, silly woman, there—I did but speak to quiet you, and still your foolish cries—there!" and he led her on.

"Now, we will sit on the knotted roots of this great tree, and darkness shall unloose my tongue, while I do thy bidding and speak boldly."

"To the old ground again. Thou wouldst have forgetfulness of that cursed day, when by foul chance—or say, rather, chance, without the foul—the noble baron—nay, his name matters not—crossed our path. Was it my fault that cards had played me false, and drawn poverty upon me? and can it be my fault that he was rich, and that I took his wealth, and life with wealth?"

"Herman," said Elfried, in a steadier voice than his own, "thou canst not boast of courage, for thou dost make excuses for thine act, and that does whisper coward. Thou didst kill the man—why avails not. The deed is done, and can not be undone; but the second victim of that deed, the helpless child, why should she be the subject of thy wrath?"

"Because I hate her! She brings the memory of the past to thee, therefore I hate her! She comes before me in thy love, therefore I hate her! I have watched you fondle her; and then she is the cause of all the grumbling thou dost give to me; for, were it not for her, thou wouldst forget the past, or seek forgetfulness in me. When I think of this, I have almost a mind to send the brat tramping

to the father, or bid thee onward with her, and leave me to my fate." His sullen mood came back to him, and he withdrew a few paces from his wife.

"Herman!" but he did not answer her. "Herman, where art thou? Speak, my husband, for I tremble with fear for thee. Herman, unsay thy hasty words; think on the helpless little face thou dost so hate; the little fragile form, the pleading voice, the warm and tender heart that longs to love even so rough a thing as thou art. O husband! crush these little, angry feelings, and seek to do some reparation for thy crime in showing mercy to that child, made orphan by thy hand. Where art thou, husband?"

She groped in that black darkness, but she could not touch him, for he had wandered on without her. Still she followed, for his footfall told the path he took. On, into the very center of that wood, creeping, crawling, things of guilt and sorrow, bound together by crime, thus they went—together, yet apart—on, into the very depth of that great gloomy wood.

And in the creaking caravan a baby slumbered; its little hands, crossed on its marble neck, the blue eyes closed and veiled with silken lashes, the golden hair falling in glossy ringlets over the rounded shoulders. A smile played o'er the dimpled features of the child, and a murmur, like dancing water in a summer's sun, fell from her opening lips.

"Father," she lisped; "Father and King of Heaven, think of a little child; take care of me; take care of little Leoline."

Good ministers watch such slumbers, and the sunshine of the infant's prayer fell on the outspread pinions, gilding them with its own brightness. But she spoke again.

"Great Lord, keep thou all harm from Leoline; hold her safe in thine own hand, and let her dare to love thee." Angels wafted soft slumbers to her, and the whispers of her guardians fell on her infant soul. She lay on that bleak common, in the old crazy carriage, with a body-guard of beings so glorious that earth's mightiest potentates, in their grandest robes of state, are but beggars to them. Yet danger hovered near her. Danger, death; for the two Cain-like wanderers had met again; the terror-shaken will of one had

yielded to the influence of the other; a second death had grown from the first, and the slumbering child was doomed. The symbol of their guilty purpose was read in their shrinking gait—in the nervous clutching of the sharpened blade which was to do the murderous work, and send the spirit of the sleeping child to a better world than theirs.

"Keep to thy purpose, wife; one stroke, and thou art mine in heart again, and I am thine—no more twain—no more cringing child to come between us. Now, give me a match, wife; kindle this brand, for the moon has turned sickly pale and will not light us. Softly, wife; I would not have thee waken her—in her sleep, wife—even in her sleep shall she die. 'Twill spare her fright, and 'twill spare her cries. Now, thine hand!"

Then the child murmured once more in her slumbers. "Father! keep all harm from Leoline! all harm from Leoline!" Shall the infant prayer fall worthless? The whisper of the tending seraph floated o'er her senses. Her blue eyes opened, and fixed with a loving smile on her whom she knew as mother.

"Mother! dear mother!" she said; "Leoline has slept, and dreamt, dear mother, of another happy land, where all is bright and good, mother;" and the little arms were twined round the neck of her who had come to slay.

The knife was ready, and the grasping hand was ready, but the base heart shrunk at the glance of those blue eyes. "One stroke—one," he uttered to himself; and as the child pressed her little cheek against the hand of Elfried, he raised the cruel weapon. But his arm fell nerveless, a film spread o'er his sight, his trembling limbs gave way, and fallen, helpless he lay, stricken with mortal sickness. The child crept near him; her little hand lay on his aching brow, whilst her baby-voice whispered words of comfort to the weeping Elfried.

"Weep not, dear," she said; "weep not, but pray; prayer is our strength, they say; ask that you may be well, and, if 'tis God's will, you will be well."

But prayer was not for the sin-stained woman. Guilt had cast its gloom around her like a dense and heavy fog, and her prayer was choked even in its very utterance.

Slowly the hours dragged through the weary night; and when morning came

Herman was quiet, for the violence of the fit had passed away, and life remained to him; his sand was not quite run; he had links in a chain of destiny still to forge. He recovered slowly, and with recovery a change came to him. He would sit for hours looking at the child, not speaking to but looking at her. She seemed to hold a strange position in his mind. He never spoke of injury to her now, and yet he did not love her; it was more fear than love which kept him silent towards her; he still would have her dead, but not by his hand. Days, weeks, months passed, and Leoline led the same wild, wandering life. It was a base one for a child—mid oaths and curses, and bad thoughts and words—yet all seemed to pass on without staining her pure mind.

She lived a dreary life, little heeding what passed around her; wandering by herself, speaking none but words of comfort to some sorrowing one, or hope to one cast down. And often as she wandered through the lanes and fields she would muse on the world and its sin, and sigh; and then again smile through the sigh and starting tears, and raise her blue eyes to the heaven from whence they seemed to draw their glorious hue, and whisper: "Thy will be done!" Then she would wander on, tended by those she saw not, and urged by them to good purposes and holy thoughts.

Yet other things crawled along her path, dark and luring beings—friends to guilt and crime; and they decked themselves with smiles, and tried to win her. They strewed flowers in her path, and bade her gather them, and told her to weave them into a garland for her golden locks, and place them in her bosom and cherish them. And she listened to these cheating words; for what could a poor weak child do against such cunning friends as those?

Once she stopped, for one of their whispers caught her ear. "Fair child," she heard, "thy little unclad feet send pity to my soul; I would save thee from the hardships of thy lot. I will give thee counsel; follow it, and thou shalt be rich, and clad in silken gear, and live with those of high estate, and gentle speech and bearing. Wouldst thou have it so?"

The voice was kind, the matter of the speech was also kind, and the heart of that friendless child pined for kindness.

"What wouldst thou have me do, good friend?" she asked, "and where art thou? I can not see thee, yet I would fain behold the outward semblance of so good a friend."

"Say thou wilt follow me, and I will glad thine eyes with my fair presence. Promise to do my bidding, tender child."

How winning the voice sounded! there was no oath, or curse, or stern command mingled with those tones of gentle entreaty. She dwelt with pleasure on them for a moment, and then her cherry lips unclosed to give the promise he required; but one had watched the tempter's power.

"Leoline," the good spirit whispered, "thou poor, weak child, well for thee is it that thou art angels' care. Those cheating words had else won thee to thy ruin. Seek not to see the hideous shape of him who has sought to snare thee. Sin's blighting presence should be hidden from those of thy years. Thus I warn him off."

It was night, and a wild scene of mirth was spread before the eyes of the child; for their wandering life led those who had her in their keeping to the turmoil and the traffic of a great city's fair. Crowds of drunken men and bold-faced women laughed and swore. Bright lights blazed and burnt as if they were as reckless as the human crowd. And the giddy show, and the booths, and games of chance—all were found there; and the shrill discordant band, and fifes, and drums, and cries of venders who would sell their wares, and shouts of those who had no wares to sell, were all heard in that Babel of human voices. Theft was but a common consequence of that lawless crowd, and blasphemy, and drunkenness, and vice of every kind. There all passed before the eyes of that poor child. She was lounging against the stall her mother kept, when some words of discontented meaning caught her ear. Two men were near, and one spoke as he held to the other a golden ornament of excessive worth. "Look here," he cried, "no more want, or care, or starving misery. This bauble decked the neck of a fair dame, who dropped it as she left her carriage. Ah! ah! she little thought that I was near to keep it so carefully for her."

The speaker was one who had oftentimes taken Leoline on his knee, told her tales, given her sweetmeats, and bought

for her toys. She loved him for his kindness, and she grieved to see him in the guise of a thief.

"Gottfried," she said, running from the place where she was standing, "Gottfried, *that*"—and she pointed to the ornament—"that is not yours; you have no right to that; restore it to the lady who has lost it."

"Restore it, innocent?" he cried. "Thou pretty babe, didst thou overhear my words? Hadst thou been older, thy knowledge might have cost thee dear; but I would not harm thee to save my life, or the life of fifty such. Restore it? And wherefore? Have I not had life thrust on me, in common with the owner of that bauble; and have I not the right to the means of life? I can not live without food, I can not have food without money; I have no money, but that will give me some. I did not *ask* the gift of life—'twas given to me; and it is a sin to give it back again unasked. I must sustain it, or I make a sin. This glittering thing was cast before me, and something whispered, 'Take it.' I obeyed the whisper, and I employ it, in the avoidance of a sin, to keep me from a sin. 'Twere casting the good thanklessly from me not to do so. Eh! sweet little one, dost thou not see the wisdom of thy old friend, Gottfried? Bright eyes, come hither." He took her in his arms, and spoke to her with earnestness, for he absolutely valued the opinion of the child, and sought to clear himself with her, not thinking how he might hurt her mind by his own specious vindication.

"Now, bright eyes, listen. If I am to live, if even the neglect of body which would bring on death be held a sin, then I must avoid that neglect. I must have food, for not to take proper food is to neglect—to sin. This pretty toy produces food, which she who owned it has in abundance; therefore she lacks it not—sins not—because she has it not, while I *must* sin without it. There, golden haired, thou seest I'm right, dost not?"

The child thought for a moment, for the sophistry had told. "I can not say why it should not be," she answered; "but—and yet I know not, for your words sound right. It seems—I can not tell—perhaps it should be as thou sayest, after all."

There was woe to the hovering guard-

ians. "Shall sin then triumph over the beloved," they said, "and unbelief find resting place within the bosom of that childish nature? Foul things of crime, speaking by their instruments, the mouths of guilty men, thus sow their seeds of ill, which spring to trees of giant growth, and lead to vice, and wrong, and crime. Shall this be, while we rest here inactive from mercy's greatest service, the special saving of a sinking soul?"

They came with magic speed to the earth, and hung above the doubting child, and wafted truth into her soul, and wisdom, and boldness to speak wisdom. Then, with her face of innocence, she looked at him who would have taught her wrong, and took his great rough hand in hers. "And yet," she said, "a light seems to have come around, and chased my doubt and darkness far away, and made it clear to my young mind that it is wrong to do this deed. Thou dost seem to speak true, but 'Thou shalt not steal.' He who has given thee life never yet gave what he would not have us guard carefully. Ask Him for food, for the means of gaining food: *ask*, not take. He feeds the ravens, and the wild birds of the wood, the beasts of prey, who dwell in the desert; even the insect—the tiny creeping insect—has its daily food, and he would not let man 'starve.' Thou wilt not keep that glittering thing—thou wilt return it." But his heart clung to its greedy purpose. "Gottfried, old friend, trust to Him to give thee more."

But his heart was darkened, and he would not hear her speak, or let truth's radiance penetrate the darkness of his mind.

Time passed on, and Leoline grew towards womanhood. Life brought to her its anxious cares; and as she looked around, it seemed that she should lighten with her hands the toil of others. Yet what could she do? She had spent her days in dreamy thought and in lonely wanderings. She liked to linger in the golden meadow filled with the yellow corn, or rove amid the woody beauties of the valley, and sing to the listening birds, who almost seemed to think her one of themselves, so blithely did they answer her; or talk to the wild flowers—and even they appeared to open their petals more widely, that not a sound of hers might escape them. This was a pleasant life,

but one not meant to fit her for the battle with the world.

And now a change hung over her, and death was coming to bring her lonely lot before her in startling clearness. For she was lonely—lonely in thought and mind. The wild, gay, reckless tone of those she lived with did not suit her; she had no friends, not even companions among them; she spoke to none, save those who had reared her, and they were going hence.

Death came to the home of Leoline, and took Herman. That was bad enough; one from the familiar seat made one seat vacant, but the next visit was worse, for the destroyer poised his shaft a second time, and cast it at the heart of Leoline's last friend, the wandering, crime-stained Elfried.

That night, as stricken, dying, half-dwelling in this world, half in another, she wavered between life and death, strange muttered words fell from her lips, words which fell with marvel on the ear of Leoline, and made the hot blood mount to her snowy brow, and caused her wild, undreamt-of wonderings.

"Leoline," so ran the muttered words, "Leoline, come hither, child, and listen to a tale I would have thee con. There is a secret of thy existence which thou must learn. I can not speak at length, for life fails, but believe when I tell thee this: Thy father was of the princely house of Reizenstein, and thy mother of name as ancient." And then her words for a moment became the ravings of a disordered mind. Then she spoke again with reason, and this time she called Leoline to her, and took her hand, and looked earnestly into her sad face, for she loved her dearly, dearly; that sinful, dying woman loved the innocence of Leoline better than any thing in earth or heaven. But Death was drawing very near her; standing so close, watching the fleeting breath—holding the nearly empty ball of sand before her eyes—holding it there in triumph; and she had much to say—much that must be said ere the grim king laid his last grasp on her.

"Leoline, my dearly loved, good child, there are words to be spoken to you, and time seems now too small to hold them; but heed me well. Thy father died by my husband's hand, and that crime drove us from our place among men, and made us wanderers, vagabonds on the earth.

Thy mother broke her heart, mourning for the death of her kind lord, (for he was one of gentle nature,) and for the loss of her blue-eyed babe—thyself. One other child she had, a boy, ten years thy senior, a bold and handsome youth; but she loved him not as she loved thyself."

The dying woman paused, and gasped for breath, and bent up on her elbow in her bed, and fixed her eyes on the terror-stricken face of Leoline, as she continued: "When I am dead, seek out this brother; tell him what I have told to you. Bid him show you a brother's love—offer the protection of a father. Seek him, Leoline, and with him safety from the world."

She ceased, and sank back exhausted, and for the moment Leoline thought death was passed; but soon she rallied, and once again opened her glazing eyes. Her voice was hoarse, and her finger, which seemed already to be part of the dead, so fleshless, bony, white did it appear, pointed to a little ebony chest of curious workmanship which stood upon the table.

"Reach me that, Leoline," and it was brought to her, and she undid the fastenings and took from the case a portrait and a letter. "Take this," she said, "ask in the distant land here writ," and she pointed to a superscription on the letter, "for the Duke of Reizenstein. Show him that picture; tell him it was the semblance of the mother of ye twain—bid him mark the azure eyes, the golden hair, the sunny smile; and then let him read the same in thy dear face, and his heart must yearn to thee, sweet snow-drop. Or shouldst thou faint ere thou canst find him, or shouldst thou need one of older years than his, then bear this cartel (and she took another paper from the casket) to the great Duke Rudolph; he is of mighty power, and will guard thee, perchance, e'en better than thy gay young brother, for he is a man in years, and has had experience of life's sorrows."

She sank back, her work on earth was done—her spirit had received the mandate of recall.

Coldly the world closed round Leoline, Poor lonely Leoline; naught did it seem to her but one huge charnel-house, death and solitude its tenants. None for her to cling too now, none to hear the cheering word from; death seemed to be her mate, ever at her side, dogging her steps, solitude the binding link between them.

"Oh! take me for thine own," she cried

to death, "take me from this charnel-house of thine, and send me to companionship with those who reared me."

Then came a whisper to her smarting spirit, like oil on troubled water.

"Gentle child," it ran, "call not on Death; thou art not his bride yet. Thou wilt live yet to bless Him, the great giver of life, for denying the boon thou cravest. For remember, child of earth, he holds the power of life or death. Dost thou not remember when that bold man said to thee, 'The gift of life was free, therefore it was a sin to give it back unasked'? Yet thou dost pray to have it taken from thee, Leoline. It is not well of thee that thou dost weary of thy Master's work, yet he wearies not of his great care to thee. Thou wouldst cast off this trouble of thy soul, and seek rest to thine aching heart; thou dost faint at the first trial, break down at the first sorrow, yet cravest another life. Art thou fitted for it? Thou dost repine at thy earthly lot—in thine impatience thou wouldst change it; in the world we dwell in, impatience and repining may not enter, and those who wear them, therefore, may not enter. All heaven of earth's discontent must be cleansed from thy sullied soul, ere thou canst stand in the great presence. Thou must go through earthly trial and sorrow; so 'tis ordained. Onwards, Leoline, in life's rough path; onwards, it is His will that thou shouldst live; onwards, and bear his will with gratitude."

The whispers ceased, and the soul of Leoline drank comfort from the thoughts.

"Thy will be done, great Lord; be thou with Leoline, great Father; take thou care of her, and send thy messengers to guard the path of poor, weak, sinful Leoline."

And now, fulfilling the last wish of her who had been as a mother to her, she commenced her long and weary journey to the land where he dwelt from whom she was to seek shelter. No broken-hearted grief, no solitude was hers now. Whether in the busy town, or open plain, or mountain, or in meadow, a bright and glorious friend was near her; and did her

weak heart faint, or her poor human fortitude give way, he would whisper: "Faint not, fail not, child of humanity; ask help and strength, and they shall be granted freely to thee."

So went she on, through summer's sun and winter's snow, in sunshine and in storm, in cold and heat—onwards still, having one thought, and only one thought on earth—to do her Master's bidding, and run the race he, in his providential mercy, had given her to accomplish.

At length on the last hour of a summer's day, when the setting sun was casting all his glory around him, as if to make men feel more sensibly the gloom of his departure, she reached a wide and open common. It was an elevated ground, and a large expanse of country lay beneath her. Here a village in its simple beauty, there a town—the thick smoke rising 'mid its walls and buildings; farther, a tall and stately column, standing alone, a monument from man to some hero's deeds. Then, woods, and fields, and roads, and a winding river, like a golden stream, creeping through all. The sun went down like a great globe of fire—the sky cast off her holiday attire, and put on the sober garb of night; the little silver stars came blinking from their hiding-place to peep at earth, and the moon cast forth her rays to seek for something purer than herself; these wandered till they fell on Leoline, then lingered, for naught purer could they find on earth to rest upon.

"Here will I lay me down and sleep," the maiden said, "here, in nature's gloomy chamber; the busy world beneath me, nearer to heaven than those of earth's creatures who dwell in earth's habitations, and its plains. Here will I sleep, and the bright sun, when he rises from his bed, will warn me, with his rays, that I should rise from mine."

In the security of innocence she slept. Her golden hair acted as a mantle to her, and the wind played gently through it, as if even his breath were too rough to sport with anything so fair and lovely as that young sleeping girl.

From Blackwood's Magazine.

WHITE'S EIGHTEEN CENTURIES.*

It is most true, as Mr. White tells us, that the range of history now extends over a time "quite appalling to the most laborious readers. And as history," he continues, "is growing every day, and every nation is engaged in the manufacture of memorable events, it is pitiable to contemplate the fate of the historic student a hundred years hence. He is not allowed to cut off at one end, in proportion as he increases at the other. He is not allowed to forget Marlborough, in consideration of his accurate acquaintance with Wellington. His knowledge of the career of Napoleon is no excuse for ignorance of Julius Caesar. All must be retained—victories, defeats, battles, sieges," etc. We hope not! We hope some classification will be made, or some line drawn, so that events which are but repetitions of other events, or which add nothing substantial to our knowledge of the great course of human affairs, may be dropped from the category of things necessary to be known. Just as the student weeds his library of duplicates, and old editions, and antiquated treatises, so the historian, perhaps, may be able to weed his annals of battles and victories, mere repetitions, or similiarities, events that teach nothing new, and have founded nothing great. Meanwhile, however, we are very thankful for such lively compendiums as that which Mr. White has given us. Here we have the eighteen centuries of Christendom—by far the most important era in the world's history—brought before us in the compass of a small volume, and of very pleasant reading. It is quite a peculiar art which Mr. White has—this of writing a rapid summary of events which shall never fatigue us by its dryness. Brief as the narrative necessarily is, it is never reduced to that meager and distressing skeleton which "Outlines" and "Abridgments" generally present to us. We have often pitied the young reader.

Under the fallacious names of Easy Introductions, and Brief Histories, they have the dryest of all books to master. Brief they may be, but through such brief records one makes the very slowest progress. One travels as if through a map, instead of through the veritable country, and amongst real towns and real rivers. Our halting-place is a name and a date. We have nothing better before us than the red and blue lines of a geographical chart, and a list of kings, and queens, and ministers. We give history to the young, with the life squeezed out of it.

Mr. White's compendium does not partake of this disadvantage. It is spirited, and, we might say, entertaining throughout. And while written in a lively manner, it will be found to be not at all deficient in grave and philosophical reflections. A clergyman and a Protestant, he writes as a Protestant Christian should and must write; but no where will the more mature reader detect any traces of narrow-mindedness or uncharitable construction. He is quite capable of perceiving the errors into which his own order have at certain periods fallen—their greed of wealth, their tenacious grasp of power. He can understand the good and the evil of great institutions. It is in a spirit of justice that he characterizes each century as it passes before him. Even the enlightened Catholic will find nothing to offend. Some stanch, eccentric Romanist, clinging to every folly of the middle ages, and abusing all who will not bow to his idols, as blind and impious—such a one will hate the cheerful, liberal tone of Mr. White's book. Such men let no one hope to conciliate. There let them stand, half-sunk in their "Serbonian bog," swearing that it is no bog at all, and cursing every spade and mattock that comes near it. Let them curse till they are hoarse, and do you ply quietly the spade and mattock. They and their bog will one day have vanished from the scene.

Yes, the range of history continues to

* *The Eighteen Christian Centuries.* By the Rev. JAMES WHITE.

extend, and what is more, its importance as a study is increasingly felt. The study itself becomes of a more elevated character as the various histories of different nations and epochs are brought together, and surveyed by the light which each reflects upon the other. Speaking broadly, and making exception for theology, there are but two great studies, History and Science. The study of languages may be considered as subordinate to history, and chiefly of use to those who have to write history. For the generality of men, it would be well if good translations were made of whatever exists in dead languages, and whatever is valuable in living and foreign languages, so that they might give all the time they have to bestow on their education to the real discipline of thinking, or the acquisition of substantive knowledge. It is lamentable to reflect how much time is wasted, how much labor is thrown away, in mastering mere words, and joining them into sentences. A lad of sixteen or seventeen is seen for hours thumbing a Greek lexicon; he is pouring some modicum of sense or nonsense from Greek into Latin, from Latin into Greek: so much simple water that he may get from any stream that is flowing, he stands there tossing backwards and forwards from one bucket to another. We call this classical education. We give our academical prizes to what a Greek philosopher would have despised as a slavish drudgery. There is hard work enough in real science; there is discipline in mathematics, or in any book of grave discussion. Why are the first energies and ardors of youth to be wasted on the *Lexicon* and the *Gradus*? But this we know is a heresy, and we shall fall under the censure of Mr. Gladstone, and a host of elegant scholars, and a still greater host, who would willingly be thought to have derived such exquisite pleasure from Greek and Latin as no English book ever gave them, and such views of science, morals, and government, as no living language could unfold. History and Science, we say, are the two great studies, including under history the forms of polity and social organization, and the aspects of moral opinion; and both studies are increasing in complexity and volume, and taxing more severely, in every subsequent age, the energies of the student.

What a host of reflections arise after

closing such a compendium as Mr. White has here given us of the eighteen centuries of the Christian world! We begin with a glance at the Pagan empire; we see Christianity mount the throne in the person of Constantine; but if in Constantine the emperor becomes a Christian, we see in the West the Roman bishop become an emperor. Then are developed all the marvelous power and virtue, the deep devotion, the astounding follies and hypocrisies, of the Church of the middle ages. The kings next reassume their place; the municipalities struggle into influence; arts and literature revive, and we have the *Reformation*. It is the development of the Christian faith, or the Christian Church, that gives their intense interest to all these centuries. Without this religious element we should have very little to admire, very little worthy of a grave study. Battles, conquests, attempts more or less successful to reduce turbulent barons and a famished peasantry into civil obedience, is all that would remain. It is the Church that dominates over all, or permeates through all. In the gayest and most festive scene, the cowl of the monk is seen passing through the crowd; and our plumed knight issues from the porch of the church. They are rightly called the Eighteen Christian Centuries.

The time has long since passed when it was the habit to bewail the downfall of the Roman Empire, and the irruptions of barbarians. That empire had sunk into the worst characteristics of Eastern despotism—it was well that it should be overthrown; and what better means could be devised than the covering of the soil with a fresh population from the north, bringing new habits, fresh virtues, fresh capacities? The Roman Empire had sunk to such debasement that even the old heathen mythology had been corrupted, and a living emperor occupied the place of Jupiter or Apollo. There were no powers in the State but the Prince, the Mob, and the Military. The wealth of the patrician, and the intelligence spread more largely, we believe, than is generally thought, through the better classes of society, were glad if they could exist in peace by any degree of servile submission. At length the military itself became corrupt and enfeebled, and the bolder and more energetic barbarians, who had been slowly adding

discipline to their bravery, broke through the barrier and possessed themselves of the soil. The old germs of civilization are not, however, quite destroyed, and there is one sacred flame lately kindled, that is by no means destined to be extinguished. You think that all this green fuel—this northern forest thrown upon the fire—will surely stifle and destroy it. Not at all; the heap smoulders and smokes, and by and by the flame bursts out higher than ever, fed by that new fuel which at first threatened to extinguish it.

Mr. White gives us some spirited delineations of the Pagan empire, both under its bad and under its good emperors. And indeed, to us, it seems a far greater perplexity, considering the circumstances out of which they were to arise, to account for a Trajan or a Marcus Aurelius, than for a Nero or Domitian. Here is a passage worth reflecting on at all times, which may convey a warning to ourselves, and be still more applicable to our gallant neighbors the French:

"We have but faint descriptions even of the aristocracy; but what we hear of them shows more clearly than any thing else, the frightful effect on morals and manners of so uncontrolled a power as was vested in the Cæsars, and teaches us that the worst of despotisms is that which is established by the unholy union of the dregs of the population and the ruling power against the peace and happiness and security of the middle class. You see how the combination of tyrant and mob succeeded in crushing all the layers of society which lay between them, till there were left only two agencies in all the world, the Emperor on his throne, and the millions fed by his bounty. The hereditary nobility—the safest bulwark of a people, and least dangerous support of a throne—were extirpated before the end of the century, and impartiality makes us confess that they fell by their own fault. There were spendthrifts in the time of Tiberius, who lavished thousands of pounds upon a supper. The pillage of the world had fallen into the hands of a few favored families, and their example had introduced a prodigality and ostentation unheard of before. No one who regarded appearances traveled any where without a troop of Numidian horsemen and outriders to clear the way. He was followed by a train of mules and sumpter-horses loaded with his vases of crystal—his richly-carved cups and dishes of silver and gold. But this profusion had its natural result in debt and degradation. The patricians who had been rivals of the imperial splendor, became dependents on the imperial gifts; and the grandson of the conqueror of a kingdom, or the proconsul of the

half of Asia, sold his ancestral palace, lived for a while on the contemptuous bounty of his master, and sank in the next generation into the nameless mass. Others more skillful preserved or improved their fortunes while they rioted in expense. By threats or promises they prevailed on the less powerful to constitute them their heirs; they traded on the strength, or talents, or the beauty of their slaves; and lent money at such usurious interest, that the borrower tried in vain to escape the shackles of the law, and ended by becoming the bondsman of the kind-hearted gentleman who had induced him to accept the loan.

"If these were the habits of the rich, how were the poor treated? The free and penniless citizens of the capital were degraded and gratified at the same time. The wealthy vied with each other in buying the favor of the mob by shows and other entertainments, by gifts of money and donations of food. But when these arts failed, and popularity could no longer be obtained by defraying the expense of a combat of gladiators, the descendants of the old patricians—of the men who had bought the land on which the Gauls were encamped outside the gates of Rome—went down into the arena themselves, and fought for the public entertainment."

Under such a system it was very little that could be effected even by the remarkable succession of men that followed upon the twelve Cæsars. Mr. White remarks, that after the reign of Domitian, the hereditary principle is excluded; the reigning emperors appoint their successors, and he attributes much to this departure from the rule of descent, this abrogation of the legal indefeasible right of hereditary succession. And the reflection appears to us very just, that this hereditary right is only seen to advantage in a limited monarchy, where the law is, in fact, the supreme ruler. In an arbitrary monarchy, the wiser rule, perhaps, would be to give the appointment of the successor to the reigning monarch. It would be in vain to set aside altogether the principle of hereditary descent, because an absolute prince, who desired to appoint his own son, would be bound by no such restraining rule. But there would, at all events, be one more chance in the nation's favor, and a sensible sovereign would not be compelled to leave the reins of power in hands utterly incapable of holding them. Mr. White says truly, even of the best emperors:

"But a government which does every thing for a people, renders it unable to do any thing for itself. The subject stood quietly by while the Em-

peror filled all the offices of state, guarded him, fed him, clothed him, treated him like a child, and reduced him at last to childlike dependence. An unjust proconsul, instead of being supported and encouraged in his exactions, was dismissed from his employment, and forced to refund his ill-got gains—the population, relieved from their oppressor, saw in his punishment the hand of an avenging Providence. The wakeful eye of the Governor in Rome saw the hostile preparations of a tribe of barbarians beyond the Danube; and the legions, crossing the river, dispersed and subdued them before they had time to devastate the Roman fields. The peaceful colonist saw in the suddenness of his deliverance, the foresight and benevolence of a divinity. No words were powerful enough to convey the sentiments of admiration awakened by such vigor and goodness in the breast of a luxurious and effeminate people; and, accordingly, if we look a little closely into the personal attributes of the five good emperors, we shall see that some part of their glory is due to the exaggerations of love and gratitude." (P. 33.)

Very possible. Mr. White, however, has not felt himself called upon to check his hand, or stint the praise he bestows upon these remarkable men. Here is his portrait of Adrian:

"Adrian believed the empire was large enough already. He withdrew the eagles from the half-subdued provinces, and contented himself with the natural limits, which it was easy to defend. But within those limits his activity was unexampled. He journeyed from end to end of his immense domain, and for seventeen years never rested in one spot. News did not travel fast in those days—but the Emperor did. Long before the inhabitants of Syria and Egypt heard that he had left Rome on an expedition to Briton, he had rushed through Gaul, crossed the channel, inquired into the proceedings of the government officers at York—given orders for a wall to keep out the Caledonians, and suddenly made his appearance among the bewildered dwellers in Ephesus or Carthage, to call tax-gatherers to order, and to inspect the discipline of his troops. The master's eye was every where, for nobody knew on what part it was fixed. And such a master no kingdom has been able to boast of since. His talents were universal. He read every thing, and forgot nothing. He was a musician, a poet, a philosopher. He studied medicine and mineralogy, and plead causes like a Cicero, and sang like a singer at the opera. Perhaps it is difficult to judge impartially of the qualities of a Roman Emperor. One day he found fault on a point of grammar with a learned man of the name of Favorinus. Favorinus could have defended himself, and justified his language, but continued silent. His friends said to him: 'Why did you not answer the Emperor's objections?' 'Do you think,' said the sensible grammarian, 'I

am going to dispute with a man who commands thirty legions?' But the greatness of Adrian's character, is that he *did* command those thirty legions. He was severe and just, and Roman discipline was never more exact." (P. 35.)

If the anecdote is true which is told of Adrian in a subsequent page, the grammarian acted very wisely in not disputing with the master of thirty legions. An architect was asked his opinion of a certain series of statues designed by the Emperor, and ranged in a sitting attitude within a temple. "If the goddesses," said the architect, "take it into their heads to rise, they will never be able to get out of the door." The criticism, or the jest, is said to have cost the man his life. Perhaps the hapless architect suffered as much for his profane levity as for his carping criticism. One detects in his remark a want of respect for the goddesses, as well as for the Emperor; for it is a remark that might have been made of the statues in the most celebrated of heathen temples. Neither Zeus nor Athene could have walked out of their temples at Athens. We perceive something of the *infidel* in the unlucky criticism of the architect; and if the philosophic Emperor thought fit to build a temple to the goddesses, he might also think it fit to uphold proper respect to them in his presence.

Mr. White observes that we are sometimes under a little delusion in the estimates we form of the magnitude of the Roman Empire, or the multitude of troops that it maintained. Russia surpasses it in extent of territory, and maintains an army considerably more numerous. France and Austria, who rank next to Russia in the number of their standing armies, could singly bring into the field a much larger force than the whole Roman Empire. The military force of the Pagan empire is here estimated at 450,000 men; the Christian monarchies of France and Austria are each of them reputed to maintain an army of 650,000 men. And when we reflect upon the invention of gunpowder, and the enormous force of artillery, it is evident that any one of the first-rate powers of modern Europe could bring into the field a destructive force that would sweep from the face of the earth the thirty legions of Adrian. The very division of Europe into a number of States involves this increase of soldiery. In the old Roman Empire the Great Medi-

terranean Sea lay peaceful as a lake, and the Roman ships had nothing to dread but the winds and the waves; whereas in modern Europe many quite artificial boundaries have to be guarded by an array of soldiers. "Belgium defends her flats with a hundred thousand men, and the marshes of Holland are secured by sixty thousand Dutch." Hitherto every thing has tended to develop the military power in Christendom.

We must not linger any longer over the old Roman empire if we are to thread our way down to the modern epoch of the Reformation. We shall not cross the Hellspont to discuss the character of Constantine, or the nature of that which passes as his conversion. We shall keep to the West. We proceed to the Fifth Century, distinguished in Mr. White's programme by the fall of Rome, and the growth of ecclesiastical authority.

"Alaric now saw all Italy within his grasp. It was not only the Goths who followed Alaric's command. All the barbarians, of whatever name or race, who had been transplanted either as slaves or soldiers — Alans, Franks, and Germans — rallied round the advancing king. There were Britons, and Saxons, and Subians. It was an insurrection of all the manly elements of society against the indescribable deprivation of the inhabitants of the Peninsula. Nobody could hold out a hand to avert the judgment that was about to fall on the devoted city. Ambassadors indeed appeared, and bought a short delay at the price of many thousand pounds' weight of gold and silver, and of large quantities of silk; but these were only additional incitements to the cupidity of the invader. Tribe after tribe rose up with fresh fury; warriors of every hue and shape, and with every manner of equipment. The handsome Goth in his iron cuirass; the Alan with his saddle covered with human skin; the German making a hideous sound by shrieking on the sharp edge of his shield; and the countrymen of Alaric himself sounding the 'horn of battle,' which terrified the Romans with its ominous note — all started forward on the march. At the head of each detachment rode a band, singing songs of exultation and defiance; and the Romans, stupefied with fear, saw these innumerable swarms defile towards the Milvian bridge, and close up every access to the town. There was no corn from Sicily or Africa; a pest raged in every house, and hunger reduced the inhabitants to despair."

But it was a despair which opened the gates of the city, which had not courage to die in its defense. For six days Rome was given up to pillage and slaughter.

Alaric, however, did not stay to take possession; he pushed on to complete the conquest of Italy. Dying soon after, Rome had a short respite, till the Vandals, under Genseric, repeated the assault and pillage. These, too, passed on, and did not stay to govern a city which they cared only to despoil and destroy. But the work of destruction was complete; the strength and spirit of the Roman citizen were utterly subdued. "Some phantom assembly, which still called itself the Roman Senate, sent back to Constantinople the tiara and purple robe, in sign that the Western Empire had passed away."

That Christian power, which was to take possession of the vacant throne, had itself shared in the general corruption. Mr. White observes, that the fall of the Roman Empire was the resurrection of Christianity. The Church had already been corrupted by wealth, and torn with controversy; adversity, and a great task to be performed, and fresh disciples, and ardent convertites, were amongst the means, we presume, of its partial restoration. When the wretched crowd flocked back to their half-ruined capital, what friend did it find but the Christian Church? And when a barbarian ruler sought for any instrument of the native government by which to govern his new subjects, what other presented itself but the Christian Church?

As the centuries roll on we see the institution of monasteries come to the aid of order and the spiritual monarchy of the popes. Perhaps Christianity has had no greater disgrace than the multitude of savage and fanatic monks that swarmed in the East, and were the terror and disgust of Alexandria; and perhaps European Christendom has received more benefit from her Benedictine monasteries than from any other institution that can be named. Under the same appellation such very different men and manners may be embraced. The monastery where labor was first honored, where peace was at all times secured, where the culture of the land was intelligently and *lovingly* pursued, where architecture was profoundly studied, where civilization and piety went hand in hand, will remain for all times a subject of deep and grateful interest to the student of modern history. It is too old a story, and we must resist the temptation to quote from Mr. White's pages,

or we should willingly extract a long passage in which he describes the benefit which the people, the king, the church, the pope, derived, in so many ways, from the monastic institutions. Spread over all Europe, isolated, yet more or less in communion with each other, not always on friendly terms with the bishop or other clerical authority of their own neighborhood, the overshadowing power of the pope was to them a protection and a bond of union. They very naturally became zealous advocates of this visible head of the universal Church.

Next comes upon the scene the rude but extensive empire of Charlemagne; it soon breaks up into fragments, and the civil government of Europe presents a sadder aspect than ever. There is very little one can honor by the name of civil government. To complete the confusion, a fresh invasion of barbarians from the north is poured over France and England—Danes, Scandinavians, or Norsemen as they are now often called. This island of Great Britain felt the full force of the invasion.

"For many years before this a pirate's boat or two from the north would run upon the sand, and send the crews to burn and rob a village on the coast of Berwick or Northumberland. Pirates we superciliously call them, but that is from a misconception of their point of honor. They were gentlemen, perhaps, 'of small estate' in some outlying district of Denmark and Norway, but endowed with stout arms and a great wish to distinguish themselves—if the distinction could be accompanied with an increase of their worldly goods. They considered the sea their own. They were also persons of a strong religious turn, and united the spirit of the missionary to the courage of the warrior and the avidity of the conqueror. Odin was still their god, the doors of the Walhalla were still open to them after death, and the skulls of their enemies were foaming with intoxicating mead. The English were renegades from the true faith, a set of driveling wretches who believed in a heaven where there was no beer, and worshiped a god who bade them pray for their enemies and bless the very people who used them ill."

We must not class the next invaders who took possession of our Island—the Normans—amongst barbarians, since they came to us after they had been somewhat civilized and Christianized in France. General report gives them credit for being somewhat more civilized than the Saxons whom they conquered. But

if we read the pages of the industrious Lappenberg, we shall not rise from his *History of our Norman Kings* with any great respect for the civilization of the Normans. The gold cup, the suit of armor, the robe of state, they knew how to purloin and appropriate; they set others to build for them; whether we are absolutely indebted to them for any thing that really advances the civilization of a country, seems doubtful. Their only art of government was to conquer and subdue, and keep as much power as possible in one single hand. There is a period in the life of nations, when the establishment of this harsh dominion is very serviceable. In this light the Norman conquest may have been beneficial, tending to unite the people into one strong nation. So far as personal influence was concerned, we were indebted only to such men as Anselm and Lanfranc, Italians by birth, but who may be called Norman bishops. "Anselm," says Lappenberg, "was one of those heroes of love and humility which Christianity has produced in every age." Lanfranc reminds us of his successor in a subsequent century, Cranmer; honest and good in the main, but having something of the wisdom of the serpent. Both Anselm and Lanfranc were amongst the most learned men of their respective ages. For the Norman kings, they seem to have had no virtue but bravery, and an occasional generosity in giving with one hand what they pilaged with the other. Richard I., the most popular of the series, was, as Sismondi tersely says, "a bad son, a bad husband, a bad brother, and a bad king;" but he was the bravest of knights, and his companions in arms loved him with a kind of idolatry. Mr. White does not spare any of them.

"They were sensual, cruel, and unprincipled to a degree unusual even in those ages of rude manners and undeveloped conscience. Their personal appearance itself was an index of the ungovernable passions within. Fat, broad-shouldered, low-statured, red-haired, loud-voiced; they were frightful to look upon, even in their calmest moods; but when the Conqueror stormed, no feeling of ruth or reverence stood in his way. When he was refused the daughter of the Count of Boulogne, he forced his way into the chamber of the Countess, seized her by the hair of her head, dragged her round the room, and stamped on her with his feet; Robert, his son, was of the same uninviting exterior; William Rufus was little and very

stout, [no great harm in that;] Henry the Second was gluttonous and debauched; Richard the Lionheart was cruel as the animal that gave him name; and John was the most debased and contemptible of mankind." (P. 277.)

The tenth century has been generally fixed upon as that in which Christendom sank to its most pitiable state, when the light of knowledge was almost extinct—the darkest amongst the dark ages. Something was added to its gloom, and something to its debasement, by a belief which prevailed towards the close of the century, that the end of all things was at hand, and the race of man speedily to be destroyed. The one thousand years had elapsed. A few texts most unskillfully applied, the roundness of the number, and the calamities of the period, were a sufficient foundation for the belief that the world would soon be destroyed. A similar belief has risen in later times less excusably.

The thousand years passed, and in the next century some dawnings of improvement are perceived. But, in reality, such was the complex nature of European society, that it is impossible to fix upon any period in which corruption is not going on in one part, and resuscitation in another. And as the centuries advance, this complication becomes more discernible; for the elements of the old Roman civilization, its jurisprudence and its literature, emerge from the ruins in which they had been buried. The Greek fathers, too, are again studied. In this century, in the seclusion of an Irish monastery, John Scotus Erigena is rivaling Origen himself in the subtlety of his speculations. He is reviving the doctrines of Philo and of the Neo-Platonists, and, so far as extracts from his works enable us to judge, he surpasses these later Greeks in logical distinctness. We note, in passing, that the greater lights of Greece—Plato and Aristotle—are, curiously enough, brought back to us in the first instance by Arabian scholars. They were studied in Bagdad and Cordova before they found their way to Paris or Salamanca.

And this reminds us of the great movement *from without*—new nations and a new religion driven upon Christendom—which seems at first to threaten the civilization of Europe, but which ends by urging it forward by a fresh impulse. It was in the seventh century, when—

"Looking forth already beyond the narrow precincts of his power, Mohammed saw in the distance, across the desert, the proud empires of Persia and Constantinople. To both he wrote letters demanding their allegiance, as God's prophet, and threatening vengeance if they disobeyed. Chosroes, the Persian, tore the letter to pieces. 'Even so,' said Mohammed, 'shall his kingdom be torn.' Heraclius the Greek, was more respectful. He placed the missive on his pillow, and very naturally fell asleep, and thought of it no more. But his descendants were not long of having their pillows not quite so provocative of repose. The city of Medina grew too small to hold the Prophet's followers, and they went forth conquering and to conquer. There were Abou Beker the Wise, and Omar the Faithful, and Khaled the Brave, and Ali the Sword of God. Mecca fell before them, and city after city sent in its adhesion to the claims of a Prophet who had such dreadful interpreters as these. The religion he preached was comparatively true. He destroyed the idols of the land, inculcated soberness, chastity, charity, and, by some faint transmission of the precepts of the Bible, inculcated brotherly love and forgiveness of wrong. But the Sword was the true Gospel. Its light was spread in Syria, and all the adjoining territories."

We need not be surprised or dismayed at the partial triumph of the Crescent over the Cross. It can not in fairness be described as the triumph of the false religion over the true, for the priesthood of the Greek Church, at the time of the fall of Constantinople, had not only departed from the simplicity of the Gospel in the doctrines they taught, but their lives were still less Christian than their faith. There was more true religion, there was more of the real spirit of Christianity, in an Omar or an Abou Beker riding on his camel with his bag of dates for all his provender, and his heart wholly devoted to what he deemed his duty to God and the service of mankind, than in the luxurious priesthood and the idle and quarrelsome people of the city of Constantinople. The Christians fell before the Moslems, because they had ceased to be Christians in every thing but name. Such literature as the capital of the Greek Empire still possessed was not altogether lost, for the refugees carried it with them into Europe. The seed was shaken over a better soil.

If the story is true of the destruction of the library at Alexandria, the successors of the Caliph Omar made ample compensation to Europe in the example they set in the prosecution of science and philosophy. We will here extract an eloquent

passage from Sismondi's *History of the Literature of the South of Europe*, which, while it records the achievements of the Saracen, and the obligations of Europe, suggests also other topics of reflection.

After relating what the Arabs or other Mussulmans had accomplished in science, in philosophy, in history, in poetry, in every department of literature, and reminding us that we probably owe to them the invention of gunpowder, the compass, paper, our numbers, etc., he proceeds thus: "Such was the brilliant light which literature and science displayed from the ninth to the fourteenth century of our era, in those vast countries which had been submitted to the yoke of Islamism. Many melancholy reflections arise when we enumerate the long list of names which, though unknown to us, were then so illustrious, and of manuscripts buried in dusty libraries, which have, in their time, exercised a powerful influence over the human intellect. What remains of so much glory? The boundless regions where Islamism reigned, and still continues to reign, are now dead to the interests of science. The rich countries of Fez and Morocco, illustrious for five centuries for the number of their academies, their universities, and their libraries, are now only deserts of burning sands, which the human tyrant disputes with the beast of prey. The smiling and fertile shores of Mauritania, where commerce, arts, and agriculture attained their highest prosperity, are now the retreats of corsairs, who spread horror over the seas, and who only relax from their labors in shameful debaucheries, until the plague periodically comes to select its victims from amongst them, and to avenge offended humanity. Egypt has by degrees been swallowed up by the sands which formerly fertilized it; Syria and Palestine are desolated by the wandering Bedouins, less terrible still than the Pasha who oppresses them. Bagdad, formerly the residence of luxury, of power, and of knowledge, is a heap of ruins. The celebrated universities of Cufa and Bussora are extinct. Those of Samarcand and Balkh share in the destruction. In this immense extent of territory, twice or thrice as large as Europe, nothing is found but ignorance, slavery, terror, and death. Few men are capable of reading the works of their illustrious ancestors; and of the few who could comprehend them, none are able to procure them. The prodigious

literary riches of the Arabians, of which we have given only a cursory view, no longer exist in any of the countries where the Arabians and the Mussulmans have rule. It is not there that we must seek either for the fame of their great men, or for their writings. What have been preserved are in the hands of their enemies, in the convents of the monks, or in the royal libraries of Europe. *And yet these vast countries have not been conquered.* It is not the stranger who has despoiled them of their riches, who has annihilated their population, and destroyed their laws, their manners, and their natural spirit. The poison was their own; it was administered by themselves, and the result has been their own destruction.

"Who may say that Europe itself, whither the empire of letters and science has been transported, which sheds so brilliant a light, which forms so correct a judgment of the past, and which compares so well the successive reigns of the literature and manners of antiquity, shall not, in a few ages, become as wild and deserted as the hills of Mauritania, the sands of Egypt, and the valleys of Anatolia? Who may say that in some new land, perhaps in those lofty regions whence the Orinoco and the river of the Amazons have their source, nations with other manners, other languages, other thoughts, and other religions, shall not arise, once more to renew the human race, and to study the past as we have studied it—nations who, hearing with astonishment of our existence, that our knowledge was as extensive as their own, and that we, like themselves, placed our trust in the stability of fame, shall pity our impotent efforts, and recall the names of Newton, of Racine, and of Tasso, as examples of the vain struggle of man to snatch that immortality of glory which fate has refused to bestow?"

A melancholy question, yet one to which we are by no means inclined to give a desponding answer. There is one art these Saracens never understood, that of civil government. Every where the religion of the Mussulman carries with it a theocratic despotism—if such an expression is permissible. Civil government never stands on its own basis, as an institution to be created at each epoch by the mundane wisdom of the times, for the mundane interest of the whole society. The Caliph was priest as well as emperor, and the Koran was the code of jurispru-

dence. There was no political freedom. Just where patriotism should have displayed itself, a religious enthusiasm or a religious bondage intervened. It was a religious enthusiasm, in the day of victory and prosperity; it was a religious despondency, in the day of darkness and of difficulty. There can be no stability where the whole people do not feel, *as a people*, a determination to uphold the national prosperity. If Arabian scholars studied, in these our dark centuries, morals and politics in Plato and Aristotle, their studies were purely speculative; they did not, and could not, introduce amongst the people any love of freedom or self-government. Herein lay the peculiar advantage of Europe, that, side by side with the power and teaching of the great Christian priesthood, there was the Gothic or German love of independence, there were the political traditions of the Republic and the Empire, there was the lingering authority of the civil or municipal law. We had a Pope, but no Caliph, or he was Caliph only in the city of Rome. Religion did not bind down the people to any one form of government, and it left an independent influence to law and politics. Contrast at this period the half-savage feudal baron, caring only for battle and the chase, with the polite aristocracy of Bagdad and Cordova, and our northern noble does not present to us a very hopeful aspect. But the independence of this man, who would live and rule in his own castle, was saving us from the fate of Bagdad and Cordova.

The eleventh century brings upon the field the Crusades and Chivalry; and here we can not help remarking on the effect which poetry, or mere works of imagination, may have on the real manners of an age. In chivalry we have an instance how a quite ideal picture of manners may be imitated to some degree, and thus the fictitious history of a past time produce a real history, bearing some faint resemblance to it. Sismondi has observed, that the more we look into this matter the more clearly shall we perceive that the system of chivalry is an invention almost entirely poetical. "It is always represented," he shrewdly observes, "as distant from us both in time and place; and whilst the contemporary historian gives us a clear, detailed, and complete account of the vices of the court and the great, of the ferocity or corruption of the nobles, and of the servility of the people, we are

astonished to find the poets, after a long lapse of time, adorning the very same ages with the most splendid fictions of grace, virtue, and loyalty." The romance-writers of the twelfth century placed the age of chivalry in the time of Charlemagne. This very age of the twelfth century was pointed to with envy by Francis I. Times nearer our own have thought that chivalry flourished in the persons of Du Guesclin and Bayard. But though, if we examine any of these periods, we shall certainly not find the ideal of chivalry, we shall find in some of them an influence of this ideal on the manners of the age. When our Edward the Black Prince treated his royal prisoner with ostentatious respect and deference, he was probably translating fiction, as well as he could, into reality. Amongst the multitude of powers, lay and spiritual, that are seen in action throughout the Europe of the middle ages, let the poet too have his place.

We pass over the terrible fate of the Albigenses, but mention the name, because the name alone will suggest that movements hostile to the Church are already making themselves felt. Such hostile movements call to mind also how the threatened Church was strengthened by the new orders of Franciscan and Dominican Friars. The monks labored and prayed; the friars preached. The first impulse of a monk was the salvation of his own soul; the first impulse of a friar was the salvation of the souls of others. How corruption entered into the new orders we need not repeat; but at their first starting all is pure and noble, and they represent the spirit of intellectual activity, so far as it is allied with the Church. They start nobly; for if they throw themselves on voluntary contributions for their support, they begin by rendering services; they preach, they teach, they confess, they guide. It is a fair and open adoption of the *voluntary principle*. Their services were great; the alms they collected very modest in amount. Afterwards the begging-box went round with great pertinacity, and the services rendered became fewer and of a very doubtful kind. The vow of poverty is evaded; the gift which was at first received in humility is now demanded from the layman as his first of duties. The preaching of the friars, which was in advance of the regular clergy, grows to be intolerant even of such

thought and learning as arise in the Church itself. It is well perhaps that the friars speedily degenerate, and lose the influence their piety gave them, for they are laboring to repress all freedom of thought, all inquiry, all science. They become tools of the Pope to collect his revenue and confirm his power. They excite opposition in the clergy as well as in the people, and this opposition is favoring the spirit of free inquiry.

Mr. White, at the commencement of each of his centuries, gives us a list of the principal *dramatis personæ*. At the commencement of the fourteenth century we read in one line the noble and hope-inspiring names of Dante, Petrarch, Boccaccio, Chaucer, Froissart. We stop at the last, and give the reader the benefit of Mr. White's description of the Herodotus of the middle ages :

"But more important than the poems of Dante and Chaucer, or the prose of Boccaccio, was the introduction of the new literature represented by Froissart. Hitherto chronicles had for the most part consisted of the record of such wandering rumors as reached a monastery, or were gathered in the religious pilgrimages of holy men. But at this time there came into notice the most inquiring, enterprising, picturesque and entertaining chronicler that had ever appeared since Herodotus read the result of his personal travels and sagacious inquiries to the assembled multitudes of Greece. John Froissart, called by the courtesy of the time Sir John, in honor of his being priest and chaplain, devoted a long life to the collection of the fullest and most trustworthy accounts of all the events and personages characteristic of his time. From 1326, when his labors commence, to 1400 when his active pen stood still, nothing happened in any part of Europe that the Paul Pry of the period did not rush off to verify on the spot. If he heard of an assemblage of knights going on at the extremities of France, or in the center of Germany; of a tournament at Bordeaux, a court gala in Scotland, or a marriage festival at Milan, his travels began—whether in the humble guise of a solitary horseman, with his portmanteau behind his saddle, and a single greyhound at his heels, as he jogged wearily across the Border, till he finally arrived in Edinburgh; or in his grander style of equipment, gallant steed, with hackney led beside him, and four dogs of high race, gamboling round his horse as he made his dignified journey from Ferrara to Rome: wherever life was to be seen and painted, the indefatigable Froissart was to be found. Whatever he had gathered up on former expeditions, whatever he learned in his present tour, down it went in his own exquisite language, with his own poetical impression of the pomps and pageantries he be-

held; and when at the end of his journey he reached the court of prince or potentate, no higher treat could be offered to the 'noble lords and ladies bright' than to form a glittering circle round the enchanting chronicler, and listen to what he had written. From palace to palace, from castle to castle, the unwearied 'picker-up of unconsidered trifles' (which, however, were neither trifles nor unconsidered, when their true value became known,) pursued his happy way, certain of a friendly reception when he arrived, and certain of not losing his time by negligence or blindness on the road. If he overtakes a stately cavalier, attended by squires and men-at-arms, he enters into conversation, drawing out the experiences of the venerable warrior by relating to him all he knew of things and persons in which he took an interest. And when they put up at some hostelry on the road, and while the gallant knight was sound asleep on his straw-stuffed couch, and his followers were wallowing amid the rushes on the parlor-floor, Froissart was busy with pen and note-book, scoring down all the old gentleman had told him, all the fights he had been present at, and the secret history (if any) of the councils of priests and kings. In this way knights in distant parts of the world became known to each other. The same voice which described to Douglas at Dalkeith the exploits of the Prince of Wales, sounded the praises of Douglas in the ears of the Black Prince at Bordeaux." (P. 336.)

A native literature, we see, is rising into existence; kingly power is obtaining its predominance over feudal license, and the mercantile and manufacturing city is displaying its wealth and establishing its municipal rights. The Church may still receive a fealty from all parties, but it can not have the same preëminent sway that it formerly possessed. There are those who will dispute its power, and question its creed. Kings make their treaties with the pope as with any other foreign potentate; and if the head of the church withstands one monarch, it is because he has another for his ally.

And now let us open Mr. White's book at the commencement of the sixteenth century. The list of *dramatis personæ* is alone sufficient to call up a host of reflections. With such monarchs as Charles V., Francis I., and Henry VIII., we are now more familiar than we are with contemporary sovereigns. They all start upon their reigns as zealous orthodox champions of the Church, but impatient of any restraint. The wealthy hierarchy which each finds in his own dominions he is most solicitous to uphold, but he must be permitted in part to govern it, and by

no means to be governed by it. The people are, in the main, attached both to their sovereigns and to the church; but the wealth and luxury amongst the higher orders of the priesthood, and the well-endowed abbeys, have created a scandal amongst the populace; whilst a more serious and enlightened class of men venture to upbraid the whole Church, as persisting to maintain many superstitions which are no longer worthy of the age. Let us now attempt to estimate that great movement called the Reformation.

In the first place it is noticeable, and proves how general were the causes which brought about this movement, that the Reformation breaks out spontaneously about the same time in Germany, France, and Switzerland. In Germany, Luther—in Switzerland, Zuinglius—in France, Lefevre and Farel are found preaching much the same doctrines, and quite independently of each other. D'Aubigné gives the precedence, in point of time, to his own countrymen.

It is perfectly certain that Zuinglius taught the doctrines of the Reformed Faith before he had heard any thing of Luther's proceedings. The simple fact was, that men had begun to read the Bible, and the perusal of the New Testament would awaken every where in minds of a certain susceptibility, the same longing after a pure spiritual religion.

Looking abroad at the Reformation as a great popular movement, we are soon made aware that this longing after a pure spiritual religion, in which the soul at once, without any priestly intermediary, communes with God or Christ, was not the only motive; the populace in general was led to take part against the established Church by the manifest hypocrisy and scandalous lives of many of the priesthood. It is necessary to bear this in mind, or the course of subsequent events can not be understood.

Surprise is often expressed that the Reformation, after extending through a certain portion of Europe, ceased to make further conquests, and was even driven back from territories of which it had taken possession. It was driven back because the priesthood of the Roman Church had reformed their own manners; it was driven back by the revived Christian zeal of pious popes, and by the more enlightened and earnest preaching of the Jesuits and of other Roman ecclesiastics.

That the Reformation was never able to extend beyond certain barriers, admits, if we look a little closely into the facts, of a very easy solution.

For in no case whatever was the reformatory movement amongst the people so general and so zealous, that it could make its way where the Church was supported by a strong civil government. In Saxony the Government went over to the Reformation. So it did in England. Even in Saxony itself, and in other states of Germany in which it triumphed, the Reformation would have been controlled and repressed if the Imperial Government had been stronger. Happily, neither in the Diet nor in the Emperor did there exist that power which could unite the whole of Germany against this new spiritual insurrection. In Scotland it made its way under a regency, or under a queen more fitted to be the ornament of a luxurious court than the controller of a turbulent aristocracy. In Switzerland it encountered a democracy, and therefore might have expected an easy triumph; but in Switzerland, as soon as the Catholic cantons had allied themselves in a fresh bond of union from which the Protestant cantons were excluded, war breaks out between the two parties, the Reformation makes no further conquest. The several cantons take up a hostile position to each other; and this is seen to be sufficient to check the growth of the new church.

Some speculative men have fancied that the Reformation could only extend amongst the Teutonic race, and that it was averse to the nature of the Celt. Lord Macanlay, who is by no means a speculative man, but distinguished by his practical sagacity, gives some countenance to this idea. He notices especially, that the cantons in Switzerland where the German language is spoken, are those only in which the Reformation had triumphed. As the Reformation had originated in Zurich, it was likely in the first instance to spread amongst kindred cantons. And the war which broke out between Zurich and the Catholic cantons was sure to check in the latter any tendency to accept its new doctrines. "The league which formed the basis of the Helvetic Union"—we are quoting from D'Aubigné—"contained an article providing that their confederation should from time to time be renewed. Such a renewal the seven cantons of Lucerne, Uri, Schweiz,

Unterwalden, Zug, Fribourg, and Soleure, resolved should take place, but they determined that the cantons of Zurich and Basle, and the towns of St. Gallen and Mulhausen, should have no part in the renewal of the alliance." The federal government, in fact, arrayed itself thus early against the Reformation. Geneva at this time was not numbered amongst the cantons of Switzerland, but was only an ally.

That the distinction of race can have very little to do with the boundaries of the Reformation, is proved by this—that in no country were the reformed doctrines received more zealously than in France. This may not be a familiar truth to many, but a perusal of the history will confirm the assertion. But they encountered here a resistance such as in no country have they ever been able to overcome. During a turbulent and unsettled period, the Reformation did make way; but when the kingly power is again strong, and ranged on the side of the Church, it is seen directly that it must succumb. It must succumb; or France must be disremembered.

But though it is impossible to admit that a Celtic population may not be as good Protestants as a Teutonic, we may observe a noticeable difference in the manner in which the new doctrines were embraced in France and in Germany. The Frenchman had no sooner received his new light, than he was for converting—and that by all means in his power—the rest of his countrymen; he was impatient of what he called idolatry, and the moment he had deserted the Virgin Mary, he was for throwing her image into the river in spite of the adoration of all her remaining votaries. Farel meets upon a bridge a procession "which was advancing, repeating prayers to St. Anthony, and having at its head two priests with an image of that saint; Farel seizes the holy hermit out of the arms of the priests, and throws it from the bridge into the river, 'Poor idolaters!' he exclaims to the people, 'will you *never* leave off your idolatry?' Priests and people stood still in amazement. A religious dread seemed to arrest the multitude. But the torpor soon ceased. 'The image is drowning!' exclaims one of the crowd, and to the silence succeed transports and cries of fury. But Farel, we know not how, escaped their rage." D'Aubigné gives se-

veral such anecdotes. No sooner had an assembly of French Protestants been gathered together, than they begin to manifest an intolerance against the public worship and public processions of the Catholics. Contrast this impatience, this impetuous proselytism, with the slow progress of the Lutherans. For a long time they submitted to the old ritual, though they had embraced quite incompatible doctrine. "The *doctrine* had been preached for four years in Wittemberg, and yet the *ritual* of the Church went on as usual." "There was a new doctrine," D'Aubigné continues, "in the world, but it had not given itself a new body. The language of the priest formed a striking contrast with the proceedings of the priest. He was heard thundering from the pulpit against the mass as an idolatrous worship, and then seen descending and taking his place before the altar to celebrate the pompous ceremony with scrupulous exactness. Every where the new gospel resounded beside the ancient ritual." Admirable instance of Teutonic forbearance! Let but the man possess his own soul in peace, and what ritual or other *practical* arrangements you make, does not greatly distress him.

Our Luther himself but for one doctrine which had become the very life and soul of the man, would have been persuaded or alarmed into an accommodation with the Church of Rome. There was one period in the negotiations between the two parties when, by mutual concessions, a compromise appeared possible, if Luther could have but relinquished his doctrine of "justification by faith alone." Writing of the great German reformer, Mr. White says: "Hungering after better things than the works of the law—abstinence, prayers, repetitions, scourgings, and all the wearisome routine of mechanical devotion—he dashed boldly into the other extreme, and preached free grace—grace without merit, the great doctrine which is called, theologically, 'justification by faith alone.'" This *other extreme* was the sheet-anchor of Reformation. And it is curious to notice that a doctrine, on which Protestants are now divided, was precisely the doctrine which irrevocably separated the Reformed churches, in the first instance, from the great Catholic hierarchy, so far as the Reformation depended upon Luther and his faithful disciples, it was the only vital

point on which no compromise was possible. The doctrine of *transubstantiation*, which to the Protestants of a later period seemed the most astounding error of the ancient Church, was maintained to the last by Luther. Some slight modification he may have made, which is indicated in controversial language by the substitution of the term *consubstantiation*; but if Luther could have kept his disciples upon that line at which he himself rested, there would have been no incurable schism on this head. D'Aubigné gives us a most spirited and graphic account of the conference held upon this subject before the Landgrave at Marburg, between the Swiss reformer, Zuinglius, and Martin Luther. Luther was supported by Melancthon, Zuinglius by Œcolampadius. The Landgrave sat behind a table; "Luther taking a piece of chalk, bent over the velvet cloth which covered it, and steadily wrote four words in large characters. All eyes followed the movement of his hand, and soon they read, *HOC EST CORPUS MEUM*. Luther wished to have this declaration continually before him, that it might strengthen his own faith, and be a sign to his adversaries." And no Catholic could have adhered more pertinaciously to the literal meaning of his text. "I differ, and shall always differ," he exclaimed. "Christ has said, *This is my body*. Let them show me that a body is not a body, I reject reason, common sense, carnal arguments, and mathematical proofs. We have the word of God. *This is my body*," he repeated, pointing with his finger to the words he had written; "the devil himself shall not drive me from that. To seek to understand it, is to fall away from the faith." Zuinglius objected, that Christ's body had ascended into heaven; and if in heaven, it is not in the bread. Luther replied: "I repeat that I have nothing to do with mathematical proofs. I will not, when Christ's body is in question, hear speak of a particular place. I absolutely will not. Christ's body is in the sacrament, but it is not there as in a place." Then, no longer content with pointing his finger at the text he had written, he seized the velvet cover, tore it off the table, and held it up to the eyes of Zuinglius and Œcolampadius. "See! see!" he said, "this is our text; you have not yet driven us from it, and we care for no other proof."

Happily it is not one mind, however

energetic, that can arrest or determine a movement like that of the Reformation. It ran its destined course. And now, looking round upon the nations of Europe, we may assuredly congratulate those countries in which, owing to favorable circumstances, the doctrines of the Reformed Church were able freely to develop themselves. There is no room for doubt or cavil on this head. It is not a question of subtle or disputable tenets. There is this broad matter-of-fact distinction between Protestantism and Catholicism—the one is the religion of the Book, the other of the Priest. In the one, every peasant consults his Bible as his sacred oracle; in the other, the Priest is his sacred oracle. The immense influence this must have on the education of the people starts to view at once. In the one, a grave responsibility is thrown on each man's mind, and he is prompted to reflect seriously and studiously on the most momentous subjects of human thought; in the other, such studious reflection is habitually repressed. When reflection does come, as at times it certainly will, it takes the form of sudden, impetuous, extreme opinion. We have not the least doubt that if the Reformed doctrines had been allowed by the civil power to spread generally over France, the political revolutions of that country would have been conducted in a less violent manner, with more steadfast aim, and to a far happier result. France would have been spared much crime and much disaster.

Action and reaction is as much a social as it is a mechanical law. Knowledge and the arts—whatever we embrace under the name of civilization—led to the Reformation; but the Reformation, again, (this reflective and studious religion of the Sacred Book, to which man is to bring his understanding and his heart,) reacts on civilization. *It maintains a steadfast intellectual energy*, whose influence is felt in every department of human enterprise; even in trade and commerce, in colonization and war, it is the steadfast and somewhat pensive Protestant that ever shows the most *persistent* zeal and determination. We will not harp upon the *right* of private judgment; we prefer to say that if you remove from the individual the *responsibility* of thinking on religion—a responsibility he is often too willing to be relieved of and to throw upon his teacher—you abstract from the

intellectual and moral life of man one of its most important elements.

Of all the countries which have received the Reformation, none has displayed the subtle, constant influence it has on the national character in so striking a manner as Great Britain. The national characters of the English and of the Scotch can not be said to be eminently peaceful, and in that respect it may be said they are not pre-eminently Christian. But what marks the character of both people, and of the Scotch in particular, is that steadfastness of purpose which comes from the union of high physical power and a constant habit of reflection. We say that this habit of earnest reflection is due in a great measure to *the religion of the Book*. Each father of the family who opens his Bible and reads it to his children is a priest himself, and looks from the page before him directly up to God. Such a man will walk sure-footed through life, whether he treads the pavement of a commercial city, or marches under the heat of an Indian sun with a rifle in his hand.

The eighteenth and last century of Mr. White's agreeable volume displays, as he says, a still widening prospect, new nations coming into being, and the old extending the sphere of their activity. "The characteristic of this period is constant change on the greatest scale." The United States rise into existence; Russia and Prussia advance upon the arena; England creates by conquest an empire in India, and enters on her still wiser course of colonization in Australia. These are topics far too vast for us here to touch upon. Mr. White is not deficient in a certain spirit of patriotism, or *John Bullism*, as it is sometimes called. The following passage, with which we must quit his agreeable pages, suggests something for exultation, and something, also, for grave reflection. We are not, it has been often said, "a military nation."

"Not a military nation! How this astounding proposition agrees with the fact that we have met in battle every single nation, and tribe, and kindred, and tongue on the face of the whole earth, in Europe, Asia, Africa, and America, and have beaten them all; how it further agrees with the fact that no civilized power was ever engaged in such constant and multitudinous wars, so that there was no month or week in the history of the last two hundred years, in which it can be said, we were not interchanging shot or saber-stroke, some where or

other on the surface of the globe; how, further still, the statement is to be reconciled with the fact, perceptible to all mankind, that the result of these engagements is an unexampled growth of influence and empire—the acquisition of kingdoms defended by millions of warriors in Hindostan; of colonies ten times the extent of the conqueror's realm, defended by Montcalm and the armies of France—we must leave to the individuals who make it; the truth being, that the British people is not only the most military nation the world has ever seen, not excepting the Roman, but the most warlike. It is impossible to say when these pages may meet the reader's eye, but at whatever time it may be, he has only to look at the *Times* newspaper of that morning, and he will see that either in the East, the West, in China, or the Cape, or the Persian Gulf, or on the Indus, or the Irrawaddy, the meteor flag is waved in bloody advance. And this seems an indispensable part of the British position. She is so ludicrously small upon the map, and so absorbed in speculation, so padded with cotton, and so sunk in coal-pits, that it is only constant experience of her prowess that keeps the world aware of her power. The other great nations can repose upon their size, and their armies of six or seven hundred thousand men. Nobody would think France or Russia weak because they were inactive. But, with us the case is different: we must fight or fall." (P. 482.)

We sincerely hope this is not quite an accurate account of the position of England. Indeed, the whole paragraph is written with a certain *abandonment*, a certain exuberance of spirits that warns us that the author does not desire to be understood quite literally. We are warlike enough, though the statement in the above extract may be somewhat exaggerated; but we trust we are not in that perilous and frightful position that "we must fight or fall." Foreign wars are not necessary to our own security as an independent people.

If the military power of France greatly exceeds our own, the danger of an invasion is not lessened by sending the largest portion of our troops to India. But we must bear in mind that, for the purpose of defense, we have not to raise a force to encounter the five or six hundred thousand troops of France; we have only to raise a force equal to such an army as France can transport to our shores. This, notwithstanding our smaller population, we can effect. We could especially keep up such an artillery, and a militia so well practiced in the rifle, that even in times of profound peace a powerful defensive army might soon be assembled. The only real

danger to England lies in that "ignorant impatience of taxation" and that habitual improvidence which render her negligent of her necessary defenses, naval and military. The people will rush into a war without counting the cost, and burden themselves with millions upon millions of debt; but if a single ship rots in the harbor without having received a hostile shot in her hulk, the cry is raised that it was built for no purpose, and that the money ought to have been saved. A reckless extravagance alternates with a wretched parsimony. If the people of

England could but learn to spend their thousands systematically, and for prospective ends, they might save the millions they occasionally squander, and rest secure within their island home.

We must now close Mr. White's book. We have run through it rapidly and with pleasure. Here and there it has seemed to us that a little more sobriety of tone or manner would be an improvement. We suggest that an index to the volume would be a useful addition; the brief headings of each division are not enough to facilitate reference.

From the North British Review.

CHATEAUBRIAND AND HIS TIMES.*

No man has exercised over modern French literature so great an influence as Chateaubriand. After the catastrophe of '89-93, by which every tradition was destroyed, every edifice overthrown, every connecting link snapped, whether in politics or religion, in morals, society, or literature—after this period of confusion and barbarism, nothing remained to France but the love of movement, noise, and conquest, and a thoroughly perverted taste in the arts. Never, probably, was the taste of a nation so completely—in some respects, so irretrievably—vitiated; for there are points on which to this day no improvement is observable. From the hour when to the love of the impure and the distorted, was added the love of the glaring and the gaudy—when the clatter and show of the Empire succeeded to the would-be Roman and Greek Republicanism of the Revolutionary days (both equally false)—from that hour the appreciative powers of the public mind in France were diverted from their natural bent, the genius of the people and of the language was changed, and changed vio-

lently; and it is to be remarked, that, since that time, the works that, in literature, for instance, have been most famous, and have had the best right to be so, have not been in strict conformity with the tendencies of the French character, or with the genius of the French tongue, the perfect development whereof is visibly marked in the illustrious writers of the age of Louis XIV.

From 1789 to 1816 the "literature of France" would be a word almost devoid of sense, were it not for Chateaubriand. He alone prevents the chain from breaking asunder, which connects the literary epoch of Rousseau, Diderot, Voltaire, and the men of the eighteenth century, with the epoch made glorious from 1814 until now, by so many writers and thinkers of great power and elevation. We would, however, merely register here the undeniable extent of Chateaubriand's influence, not its quality. We are disposed to esteem the quality of that influence an exceedingly bad one. We are disposed to believe that all that was so eminently deteriorating in the power exercised by Jean Jacques Rousseau over the youth of his time—all that was so essentially weakening and corrupt, so conducive to selfishness, vanity, and above all, to self-glorification—as

* *M. de Chateaubriand—Sa vie, ses écrits, son influence sur son temps.* By M. VILLEMARIN. 2 vols. Paris: Michel Levy.

revived and brought into fresh activity by Chateaubriand. *René*, the very worst, and therefore the most indisputably influential of all Chateaubriand's productions, has far more affinity with the genius of Jean Jacques than with any thing else in the whole world of literature—far more even than with *Werther*, to which it has often been erroneously likened; while *Valentine*, *Jacques*, and the greater part of Madame Sand's immoral creations, derive more directly their origin from *René* than from any other source that can be assigned to them. It is scarcely possible to find a writer of fiction in France who does not owe a large portion of his talent and of his individuality to Chateaubriand. It is difficult, indeed, to conceive of the existence of a great number of the dreamers in prose and poetry of contemporary France, if you abstract for a moment, in your imagination, the fact of the preëxistence of *René*. Of this most immoral but finely-written work, there is a trace in almost every writer of the class we have named. Hugo escaped it, perhaps, rather more than the others; but Lamartine owes a large portion of what he is, both in prose and verse, to Chateaubriand; Madame Sand owes to him fully as much as she does to Rousseau, and even among the more serious students of history and of science during the Restoration, you recognize the involuntary submission to an influence that is *not*, we again repeat, in accordance with the genius of the language or of the race.

Chateaubriand is an individuality worth studying in other respects than in merely literary ones. He is, from a curious concurrence of circumstances, in perpetual antagonism to Napoleon Bonaparte; and, perhaps for the very reason that there was at bottom a strong attraction of each towards the other, when the repulsion established itself, it was an invincibly violent one. When these two, who had at first seemed destined to act together, were definitively and irrevocably severed, they seemed to acknowledge the force of some law common to both, and in virtue of which they both hated each other in the same way. "Does Chateaubriand fancy I don't understand the meaning of his allusions?" exclaims the Emperor, after the publication of an article in the *Mercure*, of which paper the author of *René* was the editor—"does he think I do not know what he would be at? He seems

to take me for a fool; but *I will have him cut to pieces on the steps leading to my palace!*"* And a short while after, when, to save the life of his cousin, (Armand de Chateaubriand,) the hero of M. Villemain's book addresses a petition to the Dictator, he does so, in spite of himself, in such terms, that Napoleon, receiving the letter from the hands of Josephine, crushes it in his hand, after perusing it, and throws it into the fire. This alternate attraction and repulsion between Bonaparte and Chateaubriand, which begins in 1800 and endures till the return from Elba, is a feature in the life of both not to be left unstudied. "After all, Sire, do not forget," exclaimed courageously M. de Fontanes to the Emperor, in the midst of one of his most violent outbreaks of rage—"do not forget that *his name renders your reign illustrious*, and will, by posterity, be always mentioned immediately after your own. He can not overthrow your sovereignty; he has but his genius; but by right of his genius he is immortal in your age!"† We will not at this moment pause to explain why we think that M. de Fontanes considerably overrated the merits of Chateaubriand; one thing is certain, namely, that at the time those words were spoken, and for a full quarter of a century after, all France, without perhaps a dozen dissident voices, would have echoed the opinion, and, with M. de Fontanes, pronounced Chateaubriand the honor and glory of the age.

Where an influence has been so great and so long-enduring, where it is so impossible to deny either the extent or the strength of it, the man who has exercised it, is without any doubt a worthy subject of study for the historical, the political, or the purely literary student. A universal influence exerted, supposes a peculiar state of the public mind, and you can not, in this case, separate the agent of the influence from those he acts upon. It is all very well to say, that those upon whom he made an impression were wrong to allow themselves to be thus impressed; that may or may not be true, and has to be examined later; but the fact of the impression produced, and produced universally, denotes a certain phase of public opinion. What the large majority of a

* "Il croit que je suis un imbécile, que je ne le comprends pas. Je le ferai sabrer, sur les marches de mon palais!"—Chap. vii. p. 161.

† Chap. vii. pp. 161, 162.

nation (so large that it may be styled "the whole country") thinks upon any subject, is always deserving of attention. This reason alone, even if there were no other, would lead us to believe that a portion of our readers' time will not be misspent in seeing what a man like Villemain has to say of a man like Châteaubriand.

One of the chief causes of the small amount of truth the general public usually obtains in France upon the subject of what is termed a "great man," is the intensity to which in that country the spirit of *coterie-ism* is brought. If the "great man" in question belonged—as every man of any note almost always does—to some particular coterie, it is next to impossible that during his lifetime any word of truth should be spoken about him; for not only his own personal, and probably numerous, coterie protects him with all its power, but coteries in France do not attack each other's idols, feeling that a moment may come when this one may be glad to ask for and accept that one's help. We should think the man did not live in all France, who, whatever his particular opinions or his particular career in life, would have cared to provoke the anger of Madame la Duchesse de Duras under the Restoration, or of Madame Récamier under the Monarchy of 1830. The salon of Madame de Duras, from 1815 till 1827, was the temple of which the author of *Atala* was the high priest; and at the death of this lady (than whom one more amiable, or high-minded, or deservedly respected, never existed) M. de Châteaubriand allowed himself to be raised upon a pedestal, and sacrificed to, by Madame Récamier in her retreat of the *Abbaye aux Bois*. From the time of the Directory to that of the Revolution of July, Madame Récamier had pursued but one single object in life, that of having "a salon," as it is termed in Paris, and of attaining to the rank of a real "social influence," as it is also called in the modern phraseology of Parisian life. As with most people who do but one thing, Madame Récamier did the "one thing" well. She achieved her *salon* and her "social influence" in a period of some forty odd years, and at the death of the Duchesse de Duras, she put in her claim to the inheritance of the idol, who, well pleased with the new place of worship provided for him, drew a definitive veil

over his recollections of the friend who was gone, and prepared to make the very best, both for his comfort and for his fame, of the devotion of the friend who remained. There was no more sentiment than this comes to in the whole transaction; but safely guarded in his selfishness by so active and intelligent a worshiper as Madame Récamier, Châteaubriand was secure from even the most distant allusion to that selfishness ever being made. Madame Récamier would have but ill employed her labors of more than forty years, if she had not arrived at the means of directly or indirectly disposing of Parisian journalism, and at all events at the power of preventing any harsh discordant note from disturbing the melodious echoes of by-gone eulogies, that were still made to ring in the ears of the decaying "great man." A year or two before his death, Châteaubriand was beginning to be forgotten; when he did die, his old reputation blazed forth anew with dazzling though momentary splendor, and his funeral was, what that of men who have been idols almost invariably is, the event of the day. With the funeral, however, all was over. It was truly "dust to dust," and nothing but dust remained behind. Madame Récamier soon followed him she had worshiped to the grave, and there was now no one to prevent the truth from being spoken. But where were they who could speak it? M. de Châteaubriand had reached the age of eighty when he died, and those who could have the authority of witnesses to his acts of early life were few in number. Had his own *Memoirs* not appeared to keep up, or rather to reawaken the interest excited by his name, something nearly resembling obscurity might have enshrouded it forever. But the author of *René* calculated every thing, down to the most apparently trifling occurrence, and calculated ingeniously, and surprisingly well, as far as the stability of his own notoriety (rather than renown) was concerned. He knew what was the capacity of oblivion of his countrymen, and he was resolved to use every means in his power to prevent this being exercised upon himself. He perhaps felt that he might outlive his glory, however great, however universal it had been; he probably judged with accuracy the powers of the generation rising around him, (blindness to the merits of others was not

one of his foibles, whatever envy of their success might be,) and he may have foreseen that other voices would be listened to when his should cease to be heard; at all events, he determined that, supposing his decaying years to pass unnoticed, his death should not do so, and he settled long beforehand the arrangement of his future tomb, upon one of the islands fronting the coast of Brittany, in the Bay of St. Malo, and the manner of the burial progress by which his remains should be conveyed from the place of his demise to that of his interment. Nor was this all; he provided likewise for a prolonged revival of the public attention by the posthumous publication of his *Memoirs*—and here he had reckoned rightly. Since the days when all France was occupied with the Royalist gentleman who first—to his honor be it said—undertook, under a despotic military rule, to restore letters to the honors and “high estate” they had enjoyed under the monarchical sway of the Bourbons, never had the name of Chateaubriand been so perpetually upon the lips of the French public, as during the year and more that the printing of his posthumous *Memoirs* in the *Presse* lasted. That his was a dominant spirit there is no denying; for he managed with these *Memoirs* to balance the ardent interest felt by every one for what was going on every day, at a period (from 1848 to 1850) when no man thought himself safe if he did not watch over the affairs of the nation and of the government, whereof he could then believe himself to be a sort of component part. In spite of all political preoccupation, however, Chateaubriand compelled the attention of the whole country, and certainly no living author was ever more passionately discussed than was this dead one.

That Chateaubriand secured this universal attention by legitimate means, is not, we think, a fact as well proved as that he did secure it, and that it was universal. No! he neither said all he should have said, nor said it as he should say it; he dressed up men and facts as it suited him to attire them, and his main preoccupation was, not what was right or true, but what would create the utmost sensation. To this he sacrificed even those to whom, while living, he had made a boast of having sacrificed himself; and the bitter words (attributed truly or falsely) to M. de Montalembert are but too applicable:

“He has taken his coffin for a sentry-box, and from under its cover fires with impunity upon the passers-by.”

Had M. de Chateaubriand's *Mémoires d'Outre Tombe* being really all they professed, and all they ought to be, there would have been small appropriateness in the publication, by even so gifted a writer as M. Villemain, of a minutely detailed biography of the author of *René*. But, as the case stands, not only the *Mémoires d'Outre Tombe* are one of the causes which render an impartial and truth-speaking life of Chateaubriand necessary, but they themselves form such a feature in their own author's character, that until they are read and attentively studied, you can but imperfectly know all the defects and weaknesses of the latter.

“We are compelled to avow it,” says M. Villemain very justly, “the monument raised by the great man, and man of genius, to his own glory, the desire he has had to paint himself from the life, and leave his perfect image whole and entire to posterity, is after all but an incident the more in his destiny, a trait the more in his general physiognomy; and such being the case, the existence of these *Mémoires*, far from being an obstacle to the biographer, is, on the contrary, of manifest assistance to him, inasmuch as it contributes to guide his observations; and if the historian be really impartial, he may, after the so-called ‘*confidences*’ of his hero, study him still more narrowly, state the circumstances of his life more truly, and while in no way diminishing his fame, explain its origin, and the cause of his influence.”

As to impartiality, there can be no means of disputing that great quality of an historian in M. Villemain. His enemies even assert that, far from being led away by his hero, (whoever he may be,) he is inclined to narrow his deserts, and show to the public deficiencies it had never suspected. This is assuredly not the case in the work we are at present examining. In the literary talents of M. de Chateaubriand, and in the position he at one time so nobly took up of the champion of letters against despotism in France, there was every thing to tempt M. Villemain, and appeal to what have been the convictions of his entire existence—convictions never held by more ardently than since it has become difficult, if not dangerous, to entertain them.

In Chateaubriand, therefore, as a literary man, and as a ceaseless protestor against the narrow arbitrariness of the Empire, Villemain could take no other than a deeply sympathetic interest; but there is an uprightness and an elevation, an "unselfish passion of great things," in a mind like that of the Perpetual Secretary of the *Academie Française*, which forbid his becoming, even by mere silence, the accomplice of renown unjustly attained. Against any attempt, consequently, to place Chateaubriand's moral upon a level with his intellectual worth, against any attempt to make the *man* the equal of the writer, and defend, for instance, his political career, M. Villemain could not but raise his voice; and accordingly, whilst in the volume before us no praise that can conscientiously be given to the author of *René* is withheld, at the same time none of the erroneous appreciations that coterie-ism contrived to transform into a species of "public opinion," are allowed to subsist. For the first time since he first entered upon the scene of public life, M. de Chateaubriand has been shown to the world as he really was, as he lived, breathed, and acted. Villemain has put the author of *René* in his place.

Every man who has contributed, for no matter how small a portion, to the work of the world's teaching, *has* a place in the world's history, whereof the history of his own particular country is but a component part; but many things may combine to prevent his having what is really his *right* place. Now, few men perhaps have been longer maintained in what was not their right place than M. de Chateaubriand; and this is another reason why M. Villemain's book has so good a claim upon the praise of the reading and of the political world, and why its appearance has produced such a sensation in France.

In the first page of his new work, M. Villemain, with that delicacy of touch that is so peculiar to him, glances at the one ruling feature of Chateaubriand's whole character — selfishness. There is more selfishness than even vanity. It is such an incessant absorption of every outward thing in self, that in the end no event, of whatever magnitude, is perceived, save through this one medium only. "Chateaubriand," says his biographer, "throughout all the many volumes he has devoted to the recital of his own doings, has, without rising to the height of an

Augustine, or sinking to the level of a Rousseau, contrived invariably, and in the midst of the greatest public catastrophes ever heard of, to speak perpetually of himself." This is true; but at the same time it be must remarked, that he was almost on every occasion mixed up, not only with the "great public catastrophes" here alluded to, but that hardly a marked event of the times he lived in occurred without his in some way being a participator in it. This gives to the history of Chateaubriand a general interest, and tends to make it impossible for the book before us to be overlooked by any intelligent organ of the press in any country.

A few details upon the social position and early years of M. de Chateaubriand may not be wasted. Our intention is not to spend more time than is strictly needful upon this part of our subject. We will simply *introduce* to our readers the hero of M. Villemain's book, and of many political events in the contemporary history of France.

François-Auguste de Chateaubriand was a native of Brittany, and born in the same year which gave birth to so many illustrious men—to Napoleon, Cuvier, and our own Duke of Wellington—in 1768. He was born at St. Malo, near to which town he chose to be buried, and in an old-fashioned dirty house, which became subsequently an inn, one of the ordinary resources of which, is found in showing to travelers the room where the author of *Atala* was born. Chateaubriand was of an indisputably ancient and illustrious family, which had sunk into poverty more indisputable still. So great, indeed, had this poverty been, that M. de Chateaubriand, the father, was compelled to do what many men of his position used to do in Brittany, and what was indeed one of the time-honored customs of the province—he was compelled temporarily to renounce his aristocratical privileges, and turn trader. This he did to some profit; for, after several sea-voyages, and at one time a protracted stay in the colonies, he returned home, and, taking up his former rank and giving up commerce, he was enabled to purchase back the family estate of Combourg, in the neighborhood of St. Malo. François de Chateaubriand was his father's tenth son, and had for his immediate elders four sisters, the youngest of whom was Lucile, to whose name her brother has attached the most unimaginable and fatal celebrity

by his romance of *René*, in which he desires the reader to believe that she played the part of *Amélie*.

The subject, almost impossible to touch upon, must nevertheless be alluded to. Such things have been heard of before in the world of fiction; and the Greek poets are there to prove that even the youth of this country have, during their course of classical studies, been obliged to admit the notion of incest as a dramatic medium only. But in the case we are alluding to, the circumstances stand altogether otherwise. *René* is a Christian in the first place, and *René* is M. de Chateaubriand! Here is the incomparably monstrous part of the invention. It is needless to say that the whole was an entire and perfect fable, having no origin save in the disordered and depraved imagination of its inventor.

The proof that M. de Chateaubriand absolutely wished the world to credit his impious invention, lies in the fact that, after his death, his *Memoirs* carefully repeat the fearful tale, and seek (vaguely it is true) to substantiate what the first work of the romance writer had dared to set forth. But the two points which, in connection with *René*, we are anxious to study, are—first, the motive, the determining cause, of such a horrible creation; and next, what has been its effect upon the productions of the language in which itself was produced.

Of course, on first reading a book like *René*, the natural opinion which we form, is, that it is the result of a "mind diseased;" that ill health, and an ill-regulated, ill-disciplined spirit, can alone account for the existence of such a production. But this was *not* the case with Chateaubriand. *René*, far from being the result of any thing like insanity, was the result of positive and deliberate calculation. M. de Chateaubriand judged rightly of the temper of his times and of his countrymen, and calculated that they would receive kindly what in any other social center than France would have met with unanimous reprobation. He knew what was, in vulgar phrase, "the thing to do;" and therefore, and for no other reason, he did it. In later days, when Chateaubriand had lost in Rome, after a long and frightful illness, the person he was then supposed to be exclusively, nay, passionately devoted to, he could allow his pen to trace the following words, in a let-

ter to M. de Fontanes: "You can not imagine to what a degree I am liked and respected here for my grief, and for my conduct upon this occasion!" Madame de Beaumont had been dead but a few days, and M. de Chateaubriand's "grief" for her loss is *successful*! has a *good effect*! This is the true reading of his letter, which, in its cynical naiveté, almost expresses as much. There probably never was an act of M. de Chateaubriand's life that had not for its motive this search after *effect*; and, consequently, at the bottom of every thing he did or wrote, the surest thing to look out for is the determination to captivate *popularity*. "You sought not glory only," exclaims Villemain, in a very fine apostrophe to Chateaubriand; "you sought for the popular favor of the hour, for mere popularity, that noisy daily clamor that is to real fame what a daily newspaper is to a really fine book." Nothing ever was truer. To this notion, therefore, of "*effect*," we may regard Chateaubriand as having, when he gave *René* to the world, sacrificed every higher, nobler consideration. However, what he desired and pursued by such illegitimate means, he amply gained, and gained at once. Never was any book seized hold of by the public as was *René*; it literally absorbed the attention of the whole country; and from Lamartine to Madame Sand, from the *Méditations* and *Harmonies* down to *Jacques* and *Valentine*—refined in the former, made more practical in the latter—you may trace to the present day the influence of Chateaubriand's odious hero, whom he was well pleased the reader should suppose represented himself. From the appearance of *René* may be held to date that purely personal (or, as the Germans term it, subjective) literature that has since then predominated in France, and in which the author is held to form one with his hero. *Corinne*, *Adolphe*, *Obermann*, and many other of the most famous romances of the period of the Empire and Restoration, down to those of the period of the July monarchy, are derived far more immediately from *René* than they are from the *Nouvelle Héloïse*. With Rousseau, the author of *René* has, as we have already noticed, many points of contact, but there are also more differences between them than it has pleased some critics to discover. The one prime distinction that separates Rous-

seau from the great writers of the seventeenth century, is his love and appreciation of nature; he introduces descriptions of nature into works of fiction with wonderfully fine effect—a thing unheard of for two centuries previous. But Jean Jacques' descriptions of nature are those of a man who really loved and knew how to feel her beauties; and whatever graver objections (and these are of the gravest and highest order) are to be made to the compositions of Rousseau, there is one merit that can not be denied him—that, namely, of being the first prose landscape-painter in France. Now with Chateaubriand the matter stands differently, and, even in his descriptions of nature which appear on first reading to be magnificent, there will almost always be found, upon closer examination, to be a laboring after effect, and an absence of sincerity, and of any real emotion on the writer's part, that, in the end, spoil the production as a mere work of art. M. Villemain has furnished us in one part of his volume with the real reason of this, in the account he gives us of the manner in which M. de Chateaubriand used to write. What especially seemed like enthusiasm in his writings, was almost always the result of application and study, and of writing over again and amplifying the same passage several times. Chateaubriand, with a very large portion of incontestable genius, is one of the most perfect (if not indeed the most perfect) examples of what incalculable harm may be done by the vice of affectation, in a case even where nature has been unusually lavish of her gifts. When Chateaubriand *feels* sufficiently upon any subject, when the subject comes sufficiently home to him to make him unavoidably *express himself* in what he writes, no language can be finer than his, more simple, more concise, or more to the point. But it is rare that Chateaubriand is placed in the conditions we have here specified, and he far more frequently writes *for effect* than from the wish to *express himself*; (we repeat the words designedly,) under the influence of an *impression* strongly produced on him by some outward cause. Chateaubriand is one of the first founders of that school of writers who write for writing's sake, instead of writing to prove some fact, impart some knowledge, defend some cause, or awaken some dormant sentiment in the minds of their fellow-men. The immense superiority of the authors of

the seventeenth century in France lay in this, that they were not authors, but wrote only to say that which they strongly felt. "Be first of all a man, express yourself in writing only when you can not *act*, and what you write will to the end of time be worth reading"—this is the precept of one of the great thinkers of France, and it is one that the literature of all ages shows us to be true. The men of the seventeenth century wrote—as, for instance, Bossuet, Descartes, Pascal, and others—to defend some cause, or establish some theory, the defense or establishment of which was important to them as their own existence: all they *were* was thrown into all they *said*; upon no other condition can a man's writings be worthy to endure. Even the men of the eighteenth century were bent upon achieving an aim, they wrote to gain an end; they were misguided most of them, and their influence has been of the most mischievous, of the most demoralizing kind; but they themselves were earnest, were sincere, were convinced, and their writings have endured, and will endure. So was it even with the dreamers of the Revolutionary era; and however you may turn in horror from the insane doers of such fearful deeds as they were, you can not refuse to such written documents as they have left behind them the merit of intense energy and power of expression. Nor can it be otherwise. In these documents the writers do really *express themselves*; and full of wrong as the whole may be, you still have before you the reflection of a human soul, with all its passion, and all its life. None of this is to be found in M. de Chateaubriand, unless upon very rare occasions, and then, as we say, the man himself becoming identified with his writings, these are really stamped with the marks of genius, and will endure. With the exception of these few productions, all M. de Chateaubriand's writings are disfigured and condemned to perish from their deplorable affectation. You see that the writer's aim is not to convince you of any thing, for he is convinced of nothing himself; he is writing merely to make you stare, and exclaim how fine his writing is. This is peculiarly evident in his *Memoirs*. You wade through chapter after chapter, disgusted at the amount of insincerity, of vanity, and of *make-believe* that offers itself on all sides; but suddenly, you are arrested by a succession of pages utterly

unresembling those that have gone before — of pages full of *truth*, of real passion, and of real life. These are the pages in which the writer has *something to say*, something he feels strongly upon, and in which, forgetting all his notions of "fine writing," he simply wishes to tell or prove something, and proceeds to prove or tell it *simply*. Here, having no desire for effect, and not straining after it, he attains it at once, and the reader is profoundly impressed, and recurs often to pages so unlike the rest.

We set out by saying, that Châteaubriand's dominant principle was *self*: this is so true, that *self* alone is the subject that can wean him from affectation, and make the expression of his thought powerful, because natural. When he merely paints people or events not immediately connected with what immediately interests himself, he resorts to imagination, and deliberately determines to make an effect; but when he desires to bring you acquainted with some circumstance in which he himself is the chief actor, when he wishes to prove to you how well he conducted himself upon such or such an occasion, or how ill some one else behaved to him, then he sometimes reaches to a height of sublime eloquence. The two decidedly finest productions of Châteaubriand's pen are (in totally different styles) *René*, and his world-famous pamphlet, called *Bonaparte et les Bourbons*, (with some passages of his *Memoirs d'Outre Tombe*), and dissimilar as they may seem, both have the same origin. *René* was the *résumé* of all that its author had imagined and felt at an age when, with certain natures, imagination is the best, or, at all events, largest part of feeling. The monstrous fiction on which the mere romance, the *story* of *René*, was made to turn, was, as we have said, the product of calculation, and of the eternal wish of the author to *make a sensation*; but the story of *René* is the least part of the book, it is the mere frame in which the picture is set. The picture is that of the author. In *René*, Châteaubriand simply poured forth all that had been amassed by him, whether in heart or head, since the hour when he first began to think. For this reason, and in so far as *René* was *true*, it was not of a particular but of a general application. The reader might turn revolted from much of it; but in the vague aspirations of *René* in other respects, in his deep though ill-defined

presentiments of the weariness of a purposeless life, few men could do other than recognize the type of French youth under the unparalleled social and political convulsions of France. For *René* Châteaubriand took all his colors from himself; he *expressed himself*, and inasmuch as no man can escape the impress of his time, he expressed also what the time in which he lived had made of the generations around him.

Now his pamphlet on the state of France in 1813, which is falsely entitled a "pamphlet," but which is, in fact, an historical protest, has the same origin as *René*, but under another form and at another moment of time. Châteaubriand, as we hinted in the first words of this article, stood in a curious juxtaposition to Napoleon Bonaparte, and thought he stood in one far more curious and more important still. From youth upwards he only thought of Bonaparte in conjunction with, or relatively to himself. "We were both," says Châteaubriand in his *Memoirs*, (speaking of the year 1791,) "we were both then, Bonaparte and I, but sorry sub-lieutenants, utterly unknown; we both started from the same obscurity at the same epoch." . . . ! The reader may be surprised at this preoccupation of M. de Châteaubriand's; and as Villemain truly says, "future generations will probably marvel at this ambitious comparison, at this perpetually recurring antagonism of two names," as if in all the age those two alone could stand upon the same level; but to know a man you must see, as Pascal says, "*how* he thought his thoughts," you must make yourself entirely familiar with his *points de vue*, or you can not appreciate the value of his judgments or deductions: now, though it may seem strange, the fact *is*, that M. de Châteaubriand believed in an intellectual rivalry between the "sub-lieutenant of artillery" and himself. He never judged Napoleon from any other save from this intensely personal point of view, and he never believed Napoleon's acts towards himself to be prompted by other motives save the wish to "get rid" of a man whom he placed highly enough in his esteem to think him an *obstacle*, and to be therefore anxious to suppress him.

But antagonism was not the first feeling that arose between the Dictator and M. de Châteaubriand. It was one of sympathy; nor was it till this had become

exhausted, and had turned to bitter enmity, that Chateaubriand resolved to bring his utmost efforts to bear upon the task of shaking Bonaparte's rule. His work of *Bonaparte et les Bourbons* was one of deep and active personal hatred, of deep and personal ambition, and of the ardent desire to gain a personal and political end. Self prompted it, and consequently, unmindful of "fine writing," anxious to gain a point that was of high import to himself, Chateaubriand threw, to repeat our former words, "all he *was* into all he said;" and, addressing the public as one man would address another, gave utterance to a species of harangue of surpassing energy and beauty, and did, as has been often said, "more for the Bourbon cause than could have done an army of 100,000 men."

Speech, not to be vain, must be another form of action; and one of the highest, though *not* the absolutely highest, employment of thought is, when thought prompts to deeds. Now, it was exactly thus with Chateaubriand in the case we are stating. His "implacable pamphlet," as M. Villemain calls it, was an act, into the commission of which he threw every energy of which he was capable. Thirteen years had made M. de Chateaubriand very different from what he was at the outset, and his hatred of the Emperor was after all but the recoil of what had at first been a precisely contrary impulse. In 1800, when Chateaubriand returned from emigration, his sympathies were decidedly with Bonaparte. There exists an article in the *Mercur* of the date we mention, written by Chateaubriand, upon Madame de Staël's work of *La Littérature*, all but entirely forgotten now, but in which a very delicate flattery is contained to the First Consul, and which M. de Fontanes, the writer's undeviating admirer and friend, took care the First Consul should remark. This flattery was no other than a praise of Julius Cæsar, and a declaration of his having been "*the finest literary genius that the world ever saw!*" a judgment that, as M. Villemain observes, "might somewhat have troubled Cicero, but did not displease the ruler of the then Republic of France."

This letter, which created a sensation, was followed by the publication of *Atala*, an episode extracted from the work M. de Chateaubriand was then preparing, *Le Génie du Christianisme*. The success of

Atala was beyond what would seem possible to us now, but was, if we reflect for a moment upon the social and artistic conditions of France, perfectly explicable then. The unbearable affectation of *Atala*, the absence of all sincere emotion, of any real passion in it, the emptiness of the would-be sentiment, and the fatiguing and perpetual straining after effect in the style—nothing of all this struck any one in the year 1800, and M. de Chateaubriand, like Byron after the *Giaour*, might have said: "I went to bed obscure, I awoke and found myself famous." Not to know the author of a work so universally popular—not, at all events, to have seen and met him, was to argue yourself without the pale of that *élite* which in every country styles itself the "great world." M. de Chateaubriand's fame, and M. de Fontanes's friendship for him, took the young author into the immediate circle of the Dictator. It was at a fête given by Lucien Bonaparte, Napoleon's brother, that the First Consul and the young *émigré* were destined to meet. The manner of their meeting was certainly very curious, and might help to create a belief that Napoleon did not look upon Chateaubriand as upon the ordinary run of men. Chateaubriand was *not* presented to the First Consul, and it may be as well to recall some few incidents of the moment in order to award its full importance to the way in which the tyrant and the poet met. In 1800, it will be remembered, that any notion of religion, or of a religious establishment, was vague and faint in France. There was small doubt as to the Christian feelings of Chateaubriand; there was some doubt as to how Napoleon really thought upon the subject; consequently the manner of their meeting at Lucien's house derives interest from this fact. Bonaparte cast his eyes over the courtier crowd, appeared to single out by instinct the man whose recent fame made him an object of general attention, and, as though he knew him well, and were pursuing a conversation already begun, addressed him thus: "When I was in Egypt, I was much struck to see the Scheiks kneel down and worship their God with faces turned towards the east. *Worship is every where man's instinct, for there lies truth*; and this is what our *Ideologues* who fancy we can do without any form of worship, or any God, will not understand."

That this way of singling him out was very flattering to the vanity of a man who may have been said to have been "all vanity," is not to be disputed, nor can it be denied that he felt himself intensely flattered and delighted.

His royalism not having prevented him from approaching the chieftain whose ambition was to set royalty aside, there was no reason why M. de Châteaubriand should refuse to serve the government of Bonaparte, which still kept up the fiction of styling itself a Republican one. After three years passed in what some persons have held to be actual "expectation," the author of *Atala* consented to "serve his country," as he was pleased to call it. Cardinal Fesch was Ambassador at Rome, and M. de Châteaubriand was nominated to the post of his first secretary. To Rome he went in the spring of 1803, and remained there till January, 1804, returning to Paris in time to assist at the transformation (foreseen by every one) of the Republic into the Empire.

If space permitted, there is nothing we should like better than to initiate our readers into the details of what went on in the French Embassy at Rome, and between it and the Cabinet of the Tuilleries, during the time of the residence of M. de Châteaubriand in the Eternal City. It is an amusing picture of the way in which diplomacy was practiced under the Dictatorship; and, at first sight, you would be disposed to fancy its chief object was perpetual internal *espionage*. The Cardinal, whose natural religious indifference seems to have been one of his most marked characteristics, is quickly alarmed lest his more pious secretary should ingratiate himself too much with the Pope and the Papal court, and he is for ever writing home to assert that a great mistake has been made in sending M. de Châteaubriand to Rome. On the other hand, the secretary is for ever complaining of his Ambassador, and for ever violating all the rules of etiquette. On one occasion, he presents at the Vatican five of his country people who have never been presented at their own embassy; on another, he informs the Pope that "his apparent position is not his real one," and gives him to understand that he, and not the Cardinal, is the principal agent of the policy of the French Government! To all these mistakes (all caused by his overweening vanity, which really did induce

him to regard himself every where as of paramount importance) he added that of expediting secretly to Paris a long and confidential *note*, addressed to the First Consul, and in which he set down in succession all the reasons that made Cardinal Fesch such an exceedingly improper representative of France at the Papal See.

On the other hand, all his colleagues had taken for M. de Châteaubriand an ill-concealed aversion, and none of them could support the superiority of a man whose official rank made him their equal, and whose superiority not only came from himself, but was on most occasions openly assumed by himself. The Cardinal, far from countenancing him in any way, was occupied in also transmitting notes, touching his incommodious subordinate, to the one governing force in France, to Bonaparte himself. One of his latter ones contains this phrase: "Châteaubriand is no friend of yours. If you do not cause him to be well watched wherever you send him, you will soon see that he does all he can to support those who dislike your government. This intriguer is a most dangerous man!" "*Cet intrigant est encore un méchant homme!*" We confess that this naïve expression of the Cardinal's vexation (and fear) appears to us all the more original, and we may say diverting, when we perceive to what an extent hypocrisy must have covered over all these warring feelings that were struggling beneath the surface. At about the same time when Cardinal Fesch pronounces his secretary "*un méchant homme*," his secretary writes to M. de Fontanes that he is so very pleasantly situated with his chief that he has renounced all idea of tendering his resignation, as he had once intended to do. "The Cardinal," he says, "is so particularly kind to me, and has made me so thoroughly feel how prejudicial my retirement would be, that I have promised at all events to stay the year out. *I am in great favor here, and be quite certain that I am not at all likely to leave!*"*

It was not in M. de Châteaubriand's destiny, however, to remain, as he announces it, at Rome. The creation of a Legation to the *Pays de Vaud* is decided upon, and Cardinal Fesch's troublesome secretary is named minister. It was in allusion to this, that, on his return to

* Villomai's *Châteaubriand*, chap. vi. p. 131.

Paris, it became his wont to praise Napoleon for the "sagacity" he declared him to have evinced in seeing at once that he (Châteaubriand) "belonged to that race of men who can only be of use in the highest and first places." But whether Napoleon's "sagacity" was or was not proved by this, M. de Châteaubriand was not to profit by it. He reached Paris to witness the establishment of the Empire, and, not that usurpation *in itself* caused the diplomatic Royalist to draw back, (as he has sometimes sought to have it believed,) but a *circumstance* of that usurpation, induced him to recede from all coöperation with the Imperialist monarchy.

On the 18th March, M. de Châteaubriand went to the Tuileries to take his formal leave of the Emperor, previously to starting for Switzerland, as chief of the new Legation to the *Pays de Vaud*. He, at the time, told those about him that he had been struck by the gloomy air of Napoleon, and by the lividness of his complexion. He concluded he must be ill. On the 20th of March, as M. de Châteaubriand was returning home towards evening by the Boulevard des Invalides, he suddenly heard what but too well explained the gloom and the livid complexion of the Emperor. A public crier was crying aloud the condemnation to death, and execution, of "Louis Antoine, Henri de Bourbon, Duc d'Enghien!" At this, M. de Châteaubriand no longer hesitated. He went home, and, merely saying to his wife, "They have murdered the Duc d'Enghien," he sat down and wrote his resignation of the diplomatic office conferred upon him.

Perfectly simple and natural in the commission of this act, which was prompted by the inevitable feelings of the *man*, of the Royalist gentleman, M. de Châteaubriand lost this simplicity when, as an *author*, he came to tell the story of his conduct on this occasion. "The cry of that street-crier," he says in his *Memoirs*, "struck me like a thunder-bolt. It changed the tenor of my life, as it did that of Napoleon." Here we have once more the old preoccupation, and the desire to put himself always on a level with the man to whom (for evil or for good) the *first* place was awarded on the stage of the world's history at that epoch.

However, the preoccupation was not entirely on one side, and there certainly were in Napoleon's subsequent behavior

to the author of *René*, certain details that would lead to the belief that he did bestow upon him a degree of attention he seldom vouchsafed to any one. Years passed. In the exhibition of pictures of 1808, a great sensation was created by Girodet's portrait of Châteaubriand. The fashionable world of Paris flocked to see this picture, which was pronounced remarkable both as a likeness and as a work of art. The Director of the *Musée*, Denon, nevertheless thought the effect produced by Girodet's picture not a satisfactory one, and he caused it to be unhung and put out of sight. One day the Emperor went to visit the Exhibition; after walking rapidly through all the rooms, and casting cursory glances at the different productions of French art, of which his wish was to be esteemed a patron, he suddenly stopped, and, turning round to his suite, angrily inquired: "Where was the Châteaubriand?" Some excuse was attempted and ill received, and the picture had to be brought down from its hiding-place, and shown then and there to the Emperor. For several moments, Napoleon stood intently gazing on the features before him. All at once a bitter smile parted his lips, and—alluding to the unusually dark tints of Girodet's coloring—"Châteaubriand," said he, with affected disdain, "looks like a conspirator who has come down a chimney."

But whatever the feeling might be that drew the Emperor into paying attention to what M. de Châteaubriand might or might not do, it was held by the friends of the latter to be a sign that he might once more tempt publicity in France. In the spring of 1809, the book entitled *Les Martyrs* was published, but the facility of publication was the limit of official tolerance, and the newspapers were instructed to "do their worst" against the author; and, added to this literary persecution, a persecution of a more sanguinary kind was directed against the man who had withdrawn from Napoleon, in horror at the treacherous murder of the Duc d'Enghien. On Good Friday of the year 1809, Armand de Châteaubriand, (a cousin of the famous author's,) accused only of having helped to forward a correspondence between the *émigrés* and their friends in France, was shot on the plain of Grenelle, with a young man named de Goyon, and a man-servant of the latter. No witnesses of the deed were there, save they alone

who were ordered to do it. M. de Châteaubriand, aware that his cousin could not be saved, was only apprised of his execution at the hour when it took place; and when he reached the fatal spot, all he could do was to recognize the corpse of his unfortunate relative, disfigured by too well-aimed bullets.

"In the midst of the military splendor and of the *silence* of the Empire," says M. Villemain, "the *Moniteur* never having mentioned either Armand de Châteaubriand's trial or his sentence, a death so uselessly cruel was little talked of. No man and no party was at that time strong enough to threaten the formidable autocracy that kept down France. This had only its own excess of ambition to dread. Alone, this ambition was strong enough to work its own ruin; and its acts of tyranny were the more odious, that the victims of them were the more powerless to resist."

But, as though it were the Emperor's determination to be in perpetual contact with M. de Châteaubriand either by some act of oppression, or by some proof of apparent good-will, Napoleon, shortly after the execution of Armand de Châteaubriand, sent through his Minister of the Interior a haughty message to the Institute, to know why the members of the Committee of Prizes had ventured to omit in their report any mention of the *Génie du Christianisme*, and to desire that the omission "of a work that has gone through seven or eight editions," might be explained. Sorely puzzled were the members of the Committee, who felt M. de Châteaubriand to be the object of the master's attention, and knew he was not that of his favor. They gave, as best adapted to the circumstances, a half-and-half verdict on the book, assigning complicated reasons for not proposing it for a prize, yet "recommending it to his Imperial Majesty for a *distinction*." About this very period Joseph Chenier did—a seat at the *Académie Française* became vacant, and the members elected M. de Châteaubriand almost unanimously. The news of the vote was, as usual, carried instantly to the Emperor, who at once approved of it, saying to Fontanes, with a peculiar smile he wore on such occasions: "Ah! you thought to elude the matter altogether, gentlemen of the *Académie*; you thought to outwit me, and you have taken the man instead of the

book. I, in my turn, shall see whether there be not some means of giving the new academician some great literary position—something, for instance, like a general direction of all the libraries of the Empire." But this plan never was realized, and the antagonism between Bonaparte and Châteaubriand broke out anew upon the occasion of the latter's projected *reception* as an academician. He had found means, in the speech he wrote for this ceremony, to introduce a long and very eloquent panegyric of Cato, which, as M. Villemain remarks, recalling Cicero's phrase, "was, under the dictatorship of Cæsar, a problem worthy of Archimedes." But the problem remained unsolved, for the speech could not be pronounced. Its author would not alter it, the Emperor would not consent to it in its original form, and M. de Châteaubriand never was *received* a member of the Academy, where, under the Restoration, he took his seat, without going through the required formalities.

This time the breach with the Emperor was a definitive one, and Napoleon never more made any advances to a man who he saw it was useless attempting to enlist on the side of his renown. "If Châteaubriand's reception speech had been spoken," said M. Suard, "and had been so before an audience who for two months had thought of little else, no public hall in the world would ever have shook under thunders of applause as would that of the Institute." This took place in 1811. In 1813, after the battle of Leipsic, that "*premier coup de cloche de l'Empire*," as it has aptly been styled, Châteaubriand began to reflect upon and write the famous pamphlet we have already alluded to, and which, published the very moment after the first successes of the invading forces, added a perfectly incalculable moral weight to that which was pressing Bonaparte out of power and place. The publication of the pamphlet in question was the great turning-point in Châteaubriand's destiny; by it he really proved himself a worthy enemy of the Emperor, and he made it impossible for the Restoration not to look upon him as one of its most important auxiliaries. He established himself thereby, firmly and at once, in the double character of enemy and friend, showing *what he was worth* in each capacity. And these are the two points of view from which M. de Château-

briand should be judged. Apart from his merely literary achievements, and their undeniable influence on France, morally and intellectually speaking, he must be appreciated in his juxtaposition to Napoleon and in his juxtaposition to the Bourbons. He is, in both instances, of historical importance; for in the one he was the indirect cause of events that import much to contemporary history, and, in the other, he affords the observer a new insight into the character of the most extraordinary man in the history of modern times.

Before proceeding to examine Chateaubriand's conduct during the Restoration, and his influence on some of the acts of its government, we think it is well worth while to say a few words upon the peculiarities of character which his intercourse with Bonaparte clearly made evident in the conqueror of modern Europe. "He would not have been what he was, had the *Muse* not been there," was an assertion of Chateaubriand's about Napoleon in his first days of glory after the campaign of Italy. Though *all* that is implied thereby may not be true, a portion of it indisputably is; and it is curious to follow in the hard-handed despot of our age—in the man who ruthlessly suppressed all freedom of expression in the country he governed—what was the constant and intense preoccupation of public opinion. Could Napoleon have imagined that his fame would have been the winner by any freedom of speech allowed, he would have gladly let loose all the trumpets of the press, for he was essentially of his time, and liked noise and éclat. It was the deep knowledge of his own mistakes, and of their inevitable consequences alone, that fettered him to a silence he abhorred. The first Emperor loved fame and glory passionately, loved to be talked of, like a true son of the 19th century; and one of the penalties he paid for his ambition was the very necessity it imposed upon him of shutting men's mouths. Besides this, he was a sufficiently fine *connoisseur* in praise to look at the quality of what he obtained, and to like neither that which was given through fear or through interest, nor that which, when given, was, from its own small intrinsic value, not worth the acceptance. Napoleon had almost as few first-rate thinkers about him as his nephew, though they were generally honest men; and he would have liked that Châ-

teaubriand, left to himself, Chateaubriand utterly free, should have paid the largest possible tribute to his genius. That the author of *René* did not, would not do this, after the murder of the Duc d'Enghien, was perhaps the most serious moral defeat experienced by Napoleon, and he felt it proportionately. Chateaubriand's resolution not to praise him was, there can be no doubt, a great mortification to the Emperor; and the strong desire he had for the praise, thus withheld, serves to prove how the power and greatness he had achieved was compensated by the comparative darkness and silence with which he was forced to enshroud it. There are few circumstances in history more instructive than this preoccupation, on the part of the "modern Attila," of the man whose sole power lay in his pen. It is a great lesson, for it is the homage done by force to thought.

But Chateaubriand, throughout all this, was, we are inclined to believe, inferior to his own genius and to the part it forced him to play. It was from no deep or steady conviction of wrong on Napoleon's part that he behaved as he did; it was from the notion, that by so behaving he should produce a great effect. "You can't think how my grief causes me to be admired and respected!"* The man who, on the death of the woman he loved, could write those words to his intimate friend, was the same man who, by his resistance to Napoleon Bonaparte, sought to attract all eyes to himself, and raise himself in public esteem to the level of him whom he opposed. As we said at first, Chateaubriand never saw any thing, no matter what its magnitude, save through the medium of self. He sufficiently proved this by his conduct during the Restoration, the period of his utmost political activity; but furnished also the plainest evidence of his want of all statesmanlike qualities, and of his selfishness and perpetually irritable vanity. "*Chateaubriand est léger, et il veut commander à tout le monde.*" No truer word was ever spoken, and that word was uttered by Charles X., who had but too good cause to know M. de Chateaubriand well, and to regret that events had forced him to the acquisition of such knowledge.

M. de Chateaubriand's greatest fault, politically speaking, (and apart from his

* Villemain's *Chateaubriand*, ch. vi. p. 130.

vanity and selfishness.) was, that his was a complex nature. He was neither all a thinker, nor all a doer of deeds; he was a true type of the Frenchmen of the present age, too critical to remain content to *do or to be*, and too restless not to dream of action in the midst of thought. With him, the contemplative faculties never rose to the high they reach in really great philosophers, nor was the energy of the man sufficient to find its complete satisfaction in the mere commission of great acts—great because they are simple. All true greatness is one. There are men whose thoughts are so great that they inevitably prompt their thinkers, if the occasion offers, to act greatly; and there are men of action, whose glorious deeds shadow themselves forth in the highest possible eloquence, if it becomes necessary that they should be expressed. But these are the perfectly great—the *heroic* natures. Chateaubriand was none of these, and his contrary tendencies only sufficed to disturb and torment him, making him unsafe, and wholly unfitting him for the part of a statesman, which was rather his caprice than his ambition.

His career throughout the Restoration is marked by the most deplorable inconsistency, and by exaggeration in opinions that are not destined to endure. After having, under the Empire, clamored for liberty as for one of the first rights of man, M. de Chateaubriand was, under the Restoration, one of those *ultras*, who helped to drive the Government to the commission of its most irretrievable mistakes. Alluding to the Polignac ministry in 1830, and to the advice M. de Chateaubriand might have given the King, had he always professed the same respect for freedom that had appeared to animate him under the Empire, M. Villemain justly says: "If the author of *Bonaparte et les Bourbons* had not been disturbed by his former efforts to confide the destinies of the monarchy to the hands of those men who refused to admit the *Charte*, he could easily have shown Charles X. that he was going the same road as James II., and that, forming a ministry in opposition to the Chamber, without being able to resort to a dissolution, for fear of the country, he was condemned to a *coup d'état*, upon which he must stake his dynasty and his throne."

But Chateaubriand's hands were tied, and he could not be usefully of his own

opinion, because he had so violently defended the reverse of it. The man who had dared to say of M. Decazes, (after the murder of the Duc de Berry in 1820,) "*Les pieds lui ont glissé dans le sang et il est tombé*," could not really, ten years after, round the policy which would have been that of M. Decazes from first to last, just as, to be accepted by the retrograde party, to whom he, from an inconceivable aberration, chose to attach himself, was necessarily forced to trample upon what he was reproached with as the "Liberalism" of his early days. During Louis XVIII.'s reign, M. de Chateaubriand's whole time was employed in trying to outwit M. de Villèle, having vainly tried to seduce him into being his subordinate. At the Congress of Verona we find Chateaubriand, with a curious oblivion of his own dignity, writing to M. de Villèle that he shall be successful were he known to be entirely "M. de Villèle's man," (*si on sait que je suis votre homme*;) and a short time after, there is no malicious trick he does not attempt to play his more prosaic but very cunning colleague. The end of this is, the abrupt dismissal of Chateaubriand from his short-lived ministry, and the installation, *ad interim*, of M. de Villèle in his place! This was in 1824. A more unwarrantably harsh proceeding, (in its form,) or a more ill-advised one, as the sequel showed, could scarcely be imagined, and the open quarrel with M. de Villèle may be said to have caused the first party struggles to the long endurance and growing bitterness of which the government of the Bourbons ended by succumbing, after fifteen years of insufficiently organized resistance.

It is singular enough that, on the occasion of the attack upon M. Decazes in 1820, the best friend Chateaubriand ever had—M. de Fontanes—was irresistibly led into saying of him what twenty years before had been said by one of his worst enemies. "*Cet intrigant est un méchant homme*," said Cardinal Fesch of his troublesome secretary. "Take care of yourselves!" exclaimed Fontanes, when he saw that the ministry meant to resist—"Gare à vous autres: Chateaubriand est un terrible homme, . . . c'est un homme de génie implacable."

This was but too true; and the implacability of self-love being superadded, from the moment when M. de Chateaubriand contracted the unnatural alliance

which bound him to the retrograde party in France, he had no peace until the hopes of the Liberals were defeated. Had Louis XVIII. lived ten years longer, M. de Chateaubriand would have been thrown effectually into the back-ground; for the King knew that in the genuine and sincere practice of constitutional government lay the only chance of salvation for the dynasty and for France, and he accordingly did practice it sincerely; but Louis XVIII. once dead, and the *un-constitutional* party represented on the throne by Charles X., the capricious author of *La Monarchie selon la Charte* had every means afforded him of aiding in the task of precipitating the country to inevitable ruin. But, like all men who have often changed their convictions, Chateaubriand was distrusted by those to whom he gave his utmost support; and whilst Louis XVIII. suspected in him an agent of that retrograde faction, in which he wisely recognized the greatest danger to the state, Charles X. was suspicious of him for his recent attachment to liberal ideas. This distrust of the King's made the fortune of Chateaubriand till his death, and, in the eyes of *modern Royalists*, the author of *René* was the representative of that pure constitutional form of government, which, as in Great Britain, gives the utmost amount of freedom to the subject with the utmost amount of respect to the Crown. This was a mistake. Chateaubriand had joined with the *ultras*, to impede the progress of the only really constitutional government France ever had—that of which, under Louis XVIII., M. Decazes was, as minister, the faithful exponent—and he merely assumed a liberal air under the ministry of M. de Polignac and the reign of Charles X., because he thought that it would produce a greater effect. "You think that if M. de Laval were Foreign

Minister, I should be better able to work with him," writes M. de Chateaubriand, from his embassy in Rome, in 1829—"you are wrong; I do not feel inclined to work with any body!"—a naïve but true confession, as M. Villemain observes. "*Je suis disposé à ne m'entendre avec personne!*" The man's whole selfish and eminently *wayward* character is shown in these words.

Our readers may perhaps think time might be better employed than in studying the life of a politician who, like Chateaubriand, was of such small political usefulness to his own country. But Chateaubriand was not a political man *only*. He was, as we said in the beginning of this essay, a man whose literary influence lies at the source of nearly all the modern literature of France: he helps to afford the philosopher and historical student a clearer insight into the intimate workings of the mind of Napoleon Bonaparte; he is the abettor of many of the errors that drove the Restoration to the catastrophe of 1830; and he is the type of a whole class of Frenchmen—of that peculiarly mischievous race, in whom the caprice for action disturbing the tendency to thought, leaves neither character complete, and mars the perfect existence of either a genuine thinker, or a plain manly doer of deeds.

Were it not even for all these reasons, we would still strongly recommend our readers to read attentively M. Villemain's *Life of Chateaubriand*. They will find in it the evidence of what a great mind feels and finds expression for, even under such an iron rule of compression as that which now weighs down France, and they will, in matters of History, Poetry, Politics, and Art, profit by the not less generous, because matured judgments, of one of the greatest aestheticians of any age.

From Bentley's Miscellany.

COMING OUT OF EXILE;

OR, THE DIAMOND BRACELET FOUND.

I.

THE stately rooms of one of the finest houses in London were open for the reception of evening guests. Wax-lights, looking innumerable when reflected from the mirrors, shed their rays on the gilded decorations, on the fine paintings, and on the gorgeous dresses of the ladies; the enlivening strains of the band invited to the dance, and the rare exotics emitted a sweet perfume. It was the west-end residence of a famed and wealthy city merchant of lofty standing; his young wife was an earl's daughter, and the admission to the house of Mr. and Lady Adela Netherleigh was coveted by the gay world.

"There's a mishap!" almost screamed a pretty-looking girl. She had dropped her handkerchief and stooped for it, and her partner stooped also: in his hurry, he put his foot upon her thin white dress, she rose at the same moment, and the bottom of the skirt was torn half off.

"Quite impossible that I can finish the quadrille," quoth she to him, half in amusement, half provoked at the misfortune. "You must find another partner, and I will go and get this repaired."

She went up stairs; by some neglect the lady's-maid was not in attendance there, and, too impatient to ring and wait for her, down she flew into the housekeeper's parlor. She was quite at home in the house, for she was the sister of its mistress. She had gathered the damaged dress up, on her arm, but her white silk petticoat fell in rich folds around her.

"Just look what an object that stupid ——" And there stopped the young lady; for, instead of the housekeeper and lady's-maid, whom she expected to meet, nobody was in the room but a gentleman, a tall, handsome man. She looked thunderstruck; and then slowly advanced and

stared at him as if not believing her own eyes.

"My goodness, Gerard! Well, I should just as soon have expected to meet the dead here."

"How are you, Lady Frances?" he said, holding out his hand with hesitation.

"Lady Frances! I am much obliged to you for your formality: Lady Frances returns her thanks to Mr. Hope for his polite inquiries," continued she, in a tone of pique, and honoring him with a swimming courtesy of ceremony.

He caught her hand. "Forgive me, Fanny, but our positions are altered; at least, mine is; and how did I know that you were not?"

"You are an ungrateful——raven," cried she, "to croak like that. After getting me to write you no end of letters, with all the news about every body, and beginning 'My dear Gerard,' and ending 'Your affectionate Fanny,' and being as good to you as a sister, you meet me with 'My Lady Frances!' Now don't squeeze my hand to atoms. What on earth have you come to England for?"

"I could not stop there," he returned, with emotion; "I was fretting away my heart-strings. So I took my resolution and came back—guess in what way, Frances; and what to do."

"How should I know? To call me 'Lady Frances,' perhaps."

"As a clerk; a clerk, to earn my bread. That's what I am now. Very consistent, is it not, for one in my position to address familiarly Lady Frances Chenevix?"

"You never spoke a grain of sense in your life, Gerard," she exclaimed, peevishly. "What do you mean?"

"Mr. Netherleigh has taken me into his counting-house."

"Mr. Netherleigh!" she echoed, in surprise. "What, with that—that——"

"That crime hanging over me. Speak up, Frances."

"No; I was going to say that doubt. I don't believe you guilty—you know that, Gerard."

"I am in his house, Frances, and I came up here to-night from the city to bring a note from his partner. I declined any of the reception-rooms, not caring to meet old acquaintances, and the servants put me into this."

"But you had a mountain of debts in England, Gerard, and were afraid of arrest."

"I have managed that; they are going to let me square up by installments. Has the bracelet never been heard of?"

"Oh! that's gone for good; melted down in a caldron, as the Colonel calls it, and the diamonds re-set. It remains a mystery of the past, and is never expected to be solved."

"And they still suspect me! What is the matter with your dress?"

"Matter enough," answered she, letting it down, and turning round for his inspection. "I came here to get it repaired. My great booby of a partner did it for me."

"Fanny, how is Alice Seaton?"

"You have cause to ask after her. She is dying."

"Dying!" repeated Mr. Hope, in a hushed, shocked tone.

"I do not mean actually dying this night, or going to die to-morrow; but that she is dying by slow degrees, there is no doubt. It may be weeks off yet; I can not tell."

"Where is she?"

"Curious to say, she is where you left her—at Lady Sarah Hope's. Alice could not bear the house after the loss of the bracelet, for she was so obstinate and foolish as to persist that the servants must suspect her, even if Lady Sarah did not. She left, and this spring Lady Sarah saw her, and was so shocked at the change in her, the extent to which she had wasted, that she brought her to town by main force, and we and the doctors are trying to nurse her up. It seems of no use."

"Are you also staying at Colonel Hope's again?"

"I invited myself there a week or two ago, to be with Alice. It is pleasanter, too, than being at home."

"I suppose the Hopes are here to-night?"

"My sister is. I do not think your uncle has come yet."

"Does he ever speak of me less resentfully?"

"Not he. I think his storming over it has only made his suspicions stronger. Not a week passes but he begins again about that detestable bracelet. He is unalterably persuaded that you took it, and nobody must dare to put in a word in your defense."

"And does your sister honor me with the same belief?" demanded Mr. Hope bitterly.

"Lady Sarah is silent on the point to me; I think she scarcely knows what to believe. You see I tell you all freely, Gerard."

Before another word could be spoken, Mr. Netherleigh entered. An aristocratic man, with a noble countenance. He bore a sealed note for Mr. Hope to deliver in the city.

"Why, Fanny!" he exclaimed to his sister-in-law, "you here?"

"Yes; look at the sight they have made me," replied she, shaking down her dress for his benefit, as she had previously done for Mr. Hope's. "I am waiting for some of the damsels to mend it for me; I suppose Mr. Hope's presence has scared them away. Won't mamma be in a fit of rage when she sees it, for it is new to-night."

Gerard Hope shook hands with Lady Frances; and Mr. Netherleigh, who had a word of direction to give him, walked with him into the hall. As they stood there, who should enter but Colonel Hope, Gerard's uncle. He started back when he saw Gerard.

"C—ca—can I believe my senses?" stammered he. "Mr. Netherleigh, is he one of your guests?"

"He is here on business," was the merchant's reply. "Pass on, Colonel."

"No, sir, I will not pass on," cried the enraged Colonel, who had not rightly caught the word business. "Or if I do pass on it will only be to warn your guests to take care of their jewelry. So, sir," he added turning on his nephew, "you can come back, can you, when the proceeds of your theft are spent? you have been starrng it in Calais, I hear; how long did the bracelet last you to live upon?"

"Sir," answered Gerard, with a pale

face, "it has been starving, rather than starving. I asserted my innocence at the time, Colonel Hope, and I repeat it now."

"Innocence!" ironically repeated the Colonel, turning to all sides of the hall, as if he took delight in parading the details of the unfortunate past. "The trinkets were spread out on a table in Lady Sarah's own house—you came stealthily into it—after having been forbidden it for another fault—went stealthily into the room, and the next minute the diamond bracelet was missing. It was owing to my confounded folly in listening to a parcel of women that I did not bring you to trial at the time; I have only once regretted not doing it, and that has been ever since. A little wholesome correction at the Penitentiary might have made an honest man of you. Good night, Mr. Netherleigh; if you encourage him in your house you don't have me."

Now another gentleman had entered and heard this, some servants also heard it. Colonel Hope, who firmly believed in his nephew's guilt, turned off peppery and indignant; and Gerard, giving vent to sundry unnephew-like expletives, strode after him. The Colonel made a dash into a street cab, and Gerard walked towards the city.

Lady Frances Chenevix, her dress all right again, at least to appearance, was sitting to get her breath after a whirling waltz. Next to her sat a lady who had also been whirling; Frances did not know her.

"You are quite exhausted; we kept it up too long," said the cavalier in attendance on the stranger. "What can I get you?"

"My fan—there it is. Thank you. Nothing else."

"What an old creature to dance herself down!" thought Frances. "She's forty if she's a day."

The lady opened her fan and proceeding to use it, the diamonds of her rich bracelet gleamed right in the eyes of Frances Chenevix. Frances looked at it, and started; she strained her eyes and looked at it again; she bent nearer to it, and became agitated with emotion. If her recollection did not play her false, *that was the lost bracelet.*

She discerned her sister, Lady Adela Netherleigh, and glided up to her. "Adela, who is that lady?" she asked, pointing to the stranger.

"I don't know who she is," replied Lady Adela, carelessly, "I did not catch the name. They came with the Cadogans."

"The idea of your having people in your house that you don't know!" indignantly spoke Frances, who was working herself into a fever. "Where's Sarah? do you know that?"

"In the card-room, glued to the whist-table."

Lady Sarah, however, had unglued herself, for Frances only turned from Lady Adela to encounter her. "I do believe your lost bracelet is in the room," she whispered, in agitation; "I think I have seen it."

"Impossible!" responded Lady Sarah Hope.

"It looks exactly the same; gold links interspersed with diamonds, and the clasp is the same; three stars. A tall, ugly woman has got it on, her black hair strained off her face."

"The hair strained off the face is enough to make any woman look ugly," remarked Lady Sarah. "Where is she?"

"There, she is standing up now; let us get close to her. Her dress is that beautiful maize color with blonde lace."

Lady Sarah Hope drew near and obtained a sight of the bracelet. The color flew into her face.

"It is mine, Fanny," she whispered.

But the lady, at that moment, took a gentleman's arm, and moved away. Lady Sarah followed her, with the view of obtaining another look. Frances Chenevix went to Mr. Netherleigh and told him. He was hard of belief.

"You can not be sure at this distance of time, Fanny. And, besides, more bracelets than one may have been made of that pattern."

"I am so certain that I feel as if I could swear to the bracelet," eagerly replied Lady Frances.

"Hush, hush! Fanny."

"I recollect it perfectly; it struck me the moment I saw it. How singular that I should have been talking to Gerard Hope about it this night!"

Mr. Netherleigh smiled. "Imagination is very deceptive, Frances, and your having spoken to Mr. Hope of it brought it to your thoughts."

"But it could not have brought it to my eyes," returned Frances. "Stuff and nonsense about imagination, Mr. Nether-

leigh! I am positive it is the bracelet. Here comes Lady Sarah."

"I suppose Frances has been telling you," observed Lady Sarah Hope to her brother-in-law. "I feel convinced it is my own bracelet."

"But—as I have just remarked to Frances—other bracelets than yours may have been made precisely similar," he urged.

"If it is mine, the initials 'S. H.' are scratched on the back of the middle star. I did it one day with a penknife."

"You never mentioned that fact before, Lady Sarah," hastily responded the merchant.

"No. I was determined to give no clue: I was always afraid of the affair's being traced home to Gerard, and it would have been such a disgrace to my husband's name."

"Did you speak to her?—did you ask where she got the bracelet?" interrupted Frances.

"How could I?" retorted Lady Sarah. "I do not know her."

"I will," cried Frances, in a resolute tone.

"My dear Frances!" remonstrated Mr. Netherleigh.

"I vow I will," persisted Frances, as she moved away.

Lady Frances kept her word. She found the strange lady in the refreshment-room; and, locating herself by her side, entered upon a few trifling remarks, which were civilly received. Suddenly she dashed at once to her subject.

"What a beautiful bracelet!"

"I think it is," was the stranger's reply, holding out her arm for its inspection, without any reservation.

"Where did you buy it?" pursued Frances.

"Garrards are my jewelers."

This very nearly did for Frances; for it was at Garrards' that the Colonel originally purchased it: and it seemed to give a coloring to Mr. Netherleigh's view of more bracelets having been made of the same pattern. But she was too anxious and determined to stand upon ceremony—for Gerard's sake: and he was dearer to her than the world suspected.

"We—one of my family—lost a bracelet exactly like this some time back. When I saw it on your arm, I thought it was the same: I hoped it was."

The lady froze directly, and laid down her arm.

"Are you—pardon me, there are painful interests involved—are you sure you purchased this at Garrards'?"

"I have said that Messrs. Garrard are my jewelers," replied the stranger, in a repelling voice; and the words sounded evasive to Frances. "More I can not say: neither am I aware by what law of courtesy you thus question me, nor who you may be."

The young lady drew herself up, proudly secure in her rank. "I am Lady Frances Chenevix:" and the other bowed, and turned to the refreshment-table.

Away went Lady Frances to find the Cadogans, and inquire after the stranger.

It was a Lady Livingstone. The husband had made a mint of money at something, had been knighted, and now they were launching out in to high society.

Frances's nose went into the air. Oh law! a City knight and his wife! that was it, was it? How could Mrs. Cadogan have taken up with *them*?

The Honorable Mrs. Cadogan did not choose to say: beyond the assertion that they were extremely worthy, good kind of people. She could have said that her spendthrift of a husband had contrived to borrow money from Sir Jasper Livingstone; and to prevent being bothered for it, and keep them in good humor, they introduced the Livingstones where they could.

Frances Chenevix went home; that is, to Colonel Hope's; and told her strange tale to Alice Seaton, not only about Gerard's being in England, but about the bracelet. Lady Sarah had nearly determined not to move in the matter, for Mr. Netherleigh had infected her with his disbelief, especially since she heard of Lady Livingstone's assertion that Messrs. Garrard were her jewelers. Not so Frances: she was determined to follow it up: and next morning, saying evasively that she wanted to call at her father's, she got possession of Lady Sarah's carriage, and down she went to the Haymarket, to Garrards'. Alice Seaton, a fragile girl, with a once lovely countenance, but so faded now that she looked, as Frances had said, dying, waited her return in a pitiable state of excitement. Frances came in, looking little less excited.

"Alice, it *is* the bracelet. I am more certain than ever. Garrards' people say

they have sold articles of jewelry to Lady Livingstone, but not a diamond bracelet; and, moreover, that they never had, of that precise pattern, but the bracelet Colonel Hope bought."

"What is to be done?" exclaimed Alice.

"I know: I shall go to those Livingstones: Gerard shall not stay under this cloud, if I can help him out of it. Mr. Netherleigh won't act in it—laughs at me; Lady Sarah won't act; and we dare not tell the Colonel: he is so obstinate and wrong-headed, he would be for arresting Gerard, pending the investigation."

"Frances—"

"Now don't you preach, Alice. When I will a thing, I *will*: I am like my lady mother for that. Lady Sarah says she scratched her initials inside the bracelet, and I shall demand to see it: if these Livingstones refuse, I'll put the detectives on the scent. I will; as sure as my name is Frances Chenevix."

"And if the investigation should bring the guilt home to—to—Gerard?" whispered Alice, in a hollow tone.

"And if it should bring it home to you! and if it should bring it home to me!" spoke the exasperated Frances. "For shame, Alice: it can not bring it home to Gerard, for he was never guilty."

Alice Seaton sighed: she saw there was no help for it, for Lady Frances was resolute. "I have a deeper stake in this than you," she said, after a pause of consideration; "let me go to the Livingstones. You must not refuse me; I have an urgent motive for wishing it."

"You, you weak mite of a thing! you would faint before you got half through the interview," uttered Lady Frances, in a tone between jest and vexation.

Alice persisted. She had indeed a powerful reason for urging it, and Lady Frances allowed the point, though with much grumbling. The carriage was still at the door, for Lady Frances had desired that it should wait, and Alice hastily dressed herself and went down to it, without speaking to Lady Sarah. The footman was closing the door upon her when out flew Frances.

"Alice, I have made up my mind to go with you, for I can not guard my patience until you are back again. I can sit in the carriage while you go in. Lady Livingstone will be two feet higher from to-day—that the world should have been

amazed with the spectacle of Lady Frances Chenevix waiting humbly at her door."

Frances talked incessantly on the road, but Alice was silent: she was deliberating what she should say, and was nerving herself to the task. Lady Livingstone was at home, and Alice, sending in her card, was conducted to her presence, leaving Lady Frances in the carriage.

Lady Frances had thus described her: a woman as thin as a whipping-post, with a red nose: and Alice found Lady Livingstone answer to it very well. Sir Jasper, who was also present, was much older than his wife, and short and thick; a good-natured looking man with a bald head.

Alice, refined and sensitive, scarcely knew how she opened her subject, but she was met in a different manner from what she had expected. The knight and his wife were really worthy people, as Mrs. Cadogan had said, only she had a mania for getting into "high life and high-lived company;" a thing she would never accomplish. They listened to Alice's tale with courtesy, and at length with interest.

"You will readily conceive the nightmare this has been to me," panted Alice, for her emotion was great. "The bracelet was under my charge, and it disappeared in this extraordinary way. All the trouble that it has been productive of to me, I am not at liberty to tell you, but it has certainly shortened my life."

"You look very ill," observed Lady Livingstone, with sympathy.

"I am worse than I look. I am going into the grave rapidly. Others, less sensitive, or with stronger bodily health, might have battled successfully with the distress and annoyance; I could not. I shall die in greater peace if this unhappy affair can be cleared. Should it prove to be the same bracelet, we may be able to trace out how it was lost."

Lady Livingstone left the room and returned with the diamond bracelet. She held it out to Miss Seaton, and the color rushed into Alice's poor wan face at the gleam of the diamonds: she believed she recognized them.

"But stay," she said, drawing back her hand as she was about to touch it: "do not give it me just yet. If it be the one we lost, the letters S. H. are scratched irregularly on the back of the middle

clasp. Perhaps you will first look if they are there, Lady Livingstone."

Lady Livingstone turned the bracelet, glanced at the spot indicated, and then silently handed it to Sir Jasper. The latter smiled.

"Sure enough here's something—I can't see distinctly without my glasses. What is it, Lady Livingstone?"

"The letters S. H., as Miss Seaton describes: I can not deny it."

"Deny it! no, my lady, what for should we deny it? If we are in possession of another's bracelet, lost by fraud, and if the discovery will set this young lady's mind at ease, I don't think either you or I shall be the one to deny it. Examine it for yourself, ma'am," added he, giving it to Alice.

She turned it about, she put it on her arm, her eyes lighting with the eagerness of conviction. "It is certainly the same bracelet," she affirmed; "I could be sure of it, I think, without proof, but Lady Sarah's initials are there, as she describes to have scratched them."

"It is not beyond the range of possibility that initials may have been scratched on this bracelet without its being the same," observed Lady Livingstone.

"I think it must be the same," mused Sir Jasper. "It looks suspicious."

"Lady Frances Chenevix understood you to say you bought this of Messrs. Garrard," resumed Miss Seaton.

Lady Livingstone felt rather foolish. "What I said was, that Messrs. Garrard were my jewelers. The fact is, I do not know exactly where this was bought: but I did not consider myself called upon to proclaim that fact to a young lady who was a stranger to me, and in answer to questions I thought verging on impertinence."

"Her anxiety, scarcely less than my own, may have rendered her abrupt," replied Alice, by way of apology for Lady Frances. "Our hope is not so much to regain the bracelet, as to penetrate the mystery of its disappearance. Can you not let me know where you did buy it?"

"I can," interposed Sir Jasper: "there's no disgrace in having bought it where I did. I got it at a pawnbroker's."

Alice's heart beat violently. A pawnbroker's—what dreaded discovery was at hand?

"I was one day at the east end of London, walking past, when I saw a topas-

and-amethyst cross in a pawnbroker's window. I thought it would be a pretty ornament for my wife, and I went in and asked to look at it. In talking about jewelry with the master, he reached out this diamond bracelet, and told me *that* would be a present worth making. Now I knew my lady's head had been running on a diamond bracelet, and I was tempted to ask what was the lowest figure he would put it at. He said it was the most valuable article of the sort he had had for a long while, the diamonds of the first water, worth four hundred guineas of any body's money, but that being second-hand, he could part with it for two hundred and fifty. And I bought it. There's where I got the bracelet, ma'am."

"That was just the money Colonel Hope gave for it new, at Garrard's," said Alice. "Two hundred and fifty guineas."

Sir Jasper stared at her: and then broke forth with a comical attempt at rage, for he was one of the best-tempered men in the world.

"The old wretch of a Jew! Sold it to me at second-hand price, as he called it, for the identical sum it cost new! Why, he ought to be prosecuted for usury."

"It is just as I tell you, Sir Jasper," grumbled his lady: you will go to these low, second-hand dealers, who always cheat where they can, instead of to a regular jeweler; and nine times out of ten you get taken in."

"But your having bought it of this pawnbroker does not bring me any nearer the knowing how he procured it," observed Miss Seaton.

"I shall go to him this very day and ascertain," returned Sir Jasper. "Tradespeople may not sell stolen bracelets with impunity."

Easier said than done. The dealer protested his ignorance and innocence, and declared he had bought it in the regular course of business, at one of the pawnbroker's periodical sales. And the man spoke truth, and the detectives were again applied to.

II.

IN an obscure room of a low and dilapidated lodging-house, in a low and dilapidated neighborhood, there sat a man one evening in the coming twilight; a towering gaunt skeleton, whose remarkably long arms and legs looked little less than

skin and bone. The arms were fully exposed to view, since their owner, though he possessed and wore a waistcoat, dispensed with the use of a shirt. An article, once a coat, lay on the floor, to be donned at will—if it could be got into for the holes. The man sat on the floor in a corner, his head finding a resting-place against the wall, and he had dropped into a light sleep, but if ever famine was depicted in a face, it was in his. Unwashed, unshaven, with matted hair and feverish lips; the cheeks were hollow, the nostrils white and pinched, and the skin around the mouth had a blue tinge. Some one tried and shook the door: it aroused him, and he started up, but only to cower in a bending attitude and listen.

"I hear you," cried a voice. "How are you to-night, Joe? Open the door."

The voice was not one he knew; not one that might be responded to.

"Do you call this politeness, Joe Nicholls? If you don't open the door, I shall take the liberty of opening it for myself: which will put you to the trouble of mending the fastenings afterwards."

"Who are you?" cried Nicholls, reading determination in the voice. "I'm gone to bed, and I can't admit folks to-night."

"Gone to bed at eight o'clock?"

"Yes: I'm ill."

"I'll give you one minute, and then I come in. You will open it if you wish to save trouble."

Nicholls yielded to his fate: and opened the door.

The gentleman—he looked like one—cast his keen eyes round the room. There was not a vestige of furniture in it; nothing but the bare, dirty walls, from which the mortar crumbled, and the bare, dirty boards.

"What did you mean by saying you were gone to bed, eh?"

"So I was. I was asleep there," pointing to the corner, "and that's my bed. What do you want?" added Nicholls, peering at the stranger's face in the gloom of the evening, but seeing it imperfectly, for his hat was drawn low over it.

"A little talk with you. That last sweepstake you put into——"

The man lifted his face, and burst forth with such eagerness, that the stranger could only arrest his own words, and listen.

"It was a swindle from beginning to

end. I had scraped together the ten shillings to put in it; and I drew the right horse, and was shuffled out of the gains, and I have never had my dues, not a farthing of 'em. Since then I've been ill, and I can't get about to better myself. Are you come, sir, to make it right?"

"Some" — the stranger coughed — "friends of mine were in it also," said he; "and they lost their money."

"Every body lost it; the getters-up bolted with all they had drawn into their fingers. Have they been took, do you know?"

"All in good time; they have left their trail. So you have been ill, have you?"

"Ill! just take a sight at me! There's an arm for a big man."

He stretched out his naked arm for inspection: it appeared as if a touch would snap it. The stranger laid his hand upon its fingers, and his other hand appeared to be stealing furtively towards his own pocket. "I should say this looks like starvation, Joe."

"Som'at nigh akin to it."

A pause of unsuspicion, and the handcuffs were clapped on the astonished man. He started up with an oath.

"No need to make a noise, Nicholls," said the detective, with a careless air. "I have got two men waiting outside."

"I swear I wasn't in the plate robbery," passionately uttered the man. "I knew of it, but I didn't join 'em, and I never had the worth of as much as a salt-spoon, after it was melted down. And they call me a coward, and they leave me here to starve and die! I swear I wasn't in it."

"We'll talk of the plate robbery another time," said the officer, as he raised his hat; "you have got those bracelets on, my man, for another sort of bracelet. A diamond one. Don't you remember me?"

The prisoner's mouth fell. "I thought that was over and done with, all this time—I don't know what you mean," he added, correcting himself.

"No," said the officer, "it's just beginning. The bracelet is found, and has been traced to you. You were a clever fellow, and I had my doubts of you at the time: I thought you were too clever to go on long."

"I should be ashamed to play the sneak and catch a fellow in this way. Why couldn't you come openly, in your proper

clothes? not come playing the spy in the garb of a friendly civilian!"

"My men are in their 'proper clothes,'" returned the equable officer, "and you will have the honor of their escort presently. I came because they did not know you, and I did."

"Three officers to take a single man, and he a skeleton!" uttered Nicholls, with a vast show of indignation.

"Ay; but you were powerful once, and ferocious too. The skeleton aspect is a recent one."

"And all for nothing. I don't know about any bracelet."

"Don't trouble yourself about inventions, Nicholls. Your friend is safe in our hands, and has made a full confession."

"What friend?" asked Nicholls too eagerly.

"The lady you got to dispose of it for you to the Jew."

Nicholls was startled to incaution. "She hasn't split, has she?"

"Every particular she knew or guessed at. Split to save herself."

"Then there's no faith in woman."

"There never was yet," returned the officer. "If they are not at the top and bottom of every mischief, Joe, they are sure to be in the middle. Is this your coat?" touching it gingerly.

"She's a disgrace to the female sex, she is," raved Nicholls, disregarding the question as to his coat. "But it's a relief, now I'm took, it's a weight off my mind; I was always expecting of it, and I shall get food in the Old Bailey, at any rate."

"Ah!" said the officer, "you were in good service as a respectable servant; you had better have stuck to your duties."

"The temptation was so great," observed the man, who had evidently abandoned all idea of denial; and now that he had done so, was ready to be voluble with remembrances and particulars.

"Don't say any thing to me," said the officer. "It will be used against you."

"It came all along of my long legs," cried Nicholls, ignoring the friendly injunction, and proceeding to enlarge on the feat he had performed. "I have never had a happy hour since; I was second footman there, and a good place I had; and I have wished, thousands of times, that the bracelet had been in a sea of molten fire. Our folks had took a house

in the neighborhood of Ascot for the race week, and they had left me at home to take care of the kitchen-maid and another inferior or two, taking the rest of the servants with them. I had to clean the winders afore they returned, and I had druv it off till the Thursday evening, and out I got on the balqueny, to begin with the back drawing-room——"

"What do you say you got out on?"

"The balqueny. The thing with the green rails round it, what encloses the winders. While I was leaning over the rails afore I begun, I heered some thing like click—click, a going on in the fellow room at the next door, which was Colonel Hope's. It was like as if something light was being laid on a table, and presently I heered two voices begin to talk, a lady's and a gentleman's, and I listened——"

"No good ever comes of listening, Joe," interrupted the officer.

"I didn't listen for the sake of listening, but it was awful hot, a standing outside there in the sun, and listening was better than working. I didn't want to hear, neither, for I was thinking of my own concerns, and what a fool I was to have idled away my time all day till the sun came on to the back winders. Bit by bit, I heered what they were talking of—that it was jewels they had got there, and that one was worth two hundred guineas. Thinks I, if that was mine, I'd do no more work. After a while, I heered them go out of their room, and I thought I'd have a look at the rich things, and I stepped over slanting-ways on to the little ledge running along the houses, holding on by our balqueny, and then I passed my hands along the wall till I got hold of their balqueny—but one with ordinary legs and arms couldn't have done it. You couldn't, sir."

"Perhaps not," remarked the officer.

"There wasn't fur to fall, if I had fell, only on to the kitchen leads under; but I didn't fall, and I raised myself on to their balqueny, and looked in. My! what a show it was! stunning jewels, all laid out there; so close that if I had put my hand inside, it must have struck all among 'em; and the fiend prompted me to take one. I didn't stop to look; I didn't stop to think; the one that twinkled the brightest and had the most stones in it was the nearest to me, and I clutched it, and slipped it into my footman's undress jacket, and stepped back again."

"And got safe into your balcony."

"Yes; but I didn't clean the winder that night. I was upset, like, by what I had done, and I think, if I could have put it back again, I should; but there was no opportunity. I wrapped it up in my winder leather, and then in a sheet of paper, and then I put it up the chimley in one of the spare bedrooms. I was up the next morning afore five, and I cleaned my winders: I'd no trouble to awake myself, for I had never slept. The same day, towards evening, you called, sir, and asked me some questions—whether we had seen any one on the leads at the back, and such like. I said as master was just come home from Ascot, would you be pleased to speak to him."

"Ah!" again remarked the officer, "you were a clever fellow that day. But if my suspicions had not been strongly directed to another quarter, I might have looked you up more sharply."

"I kep' it by me for a month or two, and then I gave warning to leave. I thought I'd have my fling, and I became acquainted with her—that lady—and somehow she wormed out of me that I had got it, and I let her dispose of it for me, for she said she knew how to do it without danger."

"What did you get for it?"

The skeleton shook his head. "Thirty-four pound, and I had counted on a hundred and fifty. She took a oath she had not helped herself to a sixpence."

"Oaths are plentiful with the genus," remarked the detective.

"She stood to it she hadn't, and she stopped and helped me to spend it. After that was done, she went over to stop with some body else who was in luck; and I have tried to go on, and I can't: honesty or dishonesty it seems all one, nothing prospers, and I'm naked and famishing—and I wish I was dying."

"Evil courses never do prosper, Nicholls," said the officer, as he called in the policemen, and consigned the gentleman to their care.

So Gerard Hope was innocent!

"But how was it you skillful detectives could not be on this man's scent?" asked Colonel Hope of the officer, when he heard the tale.

"Colonel, I was thrown off it. Your positive belief in your nephew's guilt infected me, and appearances were very strong against him. Miss Seaton also

helped to throw me off: she said, if you remember, that she did not leave the room; but it now appears that she did leave it when your nephew did, though only for a few moments. Those few moments sufficed to do the job."

"It's strange she could not tell the exact truth," growled the Colonel.

"She probably thought she was exact enough, since she only remained outside the door, and could answer for it that no one entered by it. She forgot the window. I thought of the window the instant the loss was mentioned to me, but Miss Seaton's assertion that she never had the window out of her view, prevented my dwelling on it. I did go to the next door, and saw this very fellow who committed the robbery, but his manner was sufficiently satisfactory. He talked too freely; I did not like that; but I found he had been in the same service fifteen months: and, as I must repeat, I laid the guilt to another."

"It is a confoundedly unpleasant affair for me," cried the Colonel; "I have published my nephew's disgrace and guilt all over London."

"It is more unpleasant for him, Colonel," was the rejoinder of the officer.

"And I have kept him short of money, and suffered him to be sued for debt; and I have let him go and live amongst the runaway scamps over the water, and not hindered his engaging himself as a merchant's clerk: and in short, I have played up the very deuce with him."

"But reparation is doubtless in your own heart and hands, Colonel."

"I don't know that, sir," testily concluded the Colonel.

III.

ONCE more Gerard Hope entered his uncle's house; not as an interloper, stealing into it in secret, but as an honored guest, to whom reparation was due, and must be made. Alice Seaton leaned back in her invalid chair, a joyous flush on her wasted cheek, and a joyous happiness in her eye. Still the shadow of coming death was there, and Mr. Hope was shocked to see her—more shocked and startled than he had expected, or chose to express.

"O Alice! what has done this?"

"That," she answered, pointing to the

bracelet, which, returned to its true owner, lay on the table. "I should not have lived many years; of that I am convinced; but I might have lived a little longer than I now shall. It has been the cause of misery to many, and Lady Sarah says she shall never regard it but as an ill-starred trinket, or wear it with any pleasure."

"But, Alice, why should you have suffered it thus to affect you?" he remonstrated. "You knew your own innocence, and you say you believed and trusted in mine: what did you fear?"

"I will tell you, Gerard," she resumed, a deeper hectic rising to her cheeks. "I could not have confessed my fear, even in dying; it was too distressing, too terrible; but now that it is all clear, I will tell it. *I believed my sister had taken the bracelet.*"

He uttered an exclamation of amazement.

"I have believed it all along. She had called to see me that night, and was, for a minute or two, in the room alone with the bracelets: I knew she, at that time, was short of money, and I feared she had been tempted to take it—just as this unfortunate servant man was tempted. O Gerard! the dread of it has been upon me night and day, preying upon my fears, weighing down my spirits, wearing away my health and my life. And I had to bear it all in silence: it is that dreadful silence which has killed me."

"Alice, this must have been a morbid fear?"

"Not so—if you knew all. But now that I have told you, let us not revert to it again: it is at an end, and I am very thankful. That it should so end, has been my prayer and hope: not quite the only hope," she added, looking up at him with a sunny smile; "I have had another."

"What is it? You look as if it were connected with me."

"So it is. Ah! Gerard! can you not guess it?"

"No," he answered, in a stifled voice, "I can only guess that you are lost to me."

"Lost to all here. Have you forgotten our brief conversation the night you went into exile? I told you then there was one far more worthy of you than I could have ever been."

"None will ever be half so worthy: or—I will say it, Alice, in spite of your warning hand—half so loved."

"Gerard," she continued, sinking her voice, "she has waited for you."

"Nonsense," he rejoined.

"She has. I have watched, and seen, and I know it; and I tell it you under secrecy: when she is your wife, not before, you may tell her that I saw it and said it. She is a lovable and attractive girl, and she does not and will not marry: you are the cause."

"My darling——"

"Stay, Gerard," she gravely interrupted; "those words of endearment are not for me. Give them to her: can you deny that you love her?"

"Perhaps I do—in a degree. Next to yourself——"

"Put me out of your thoughts while we speak. If I were—where I so soon shall be, would she not be dearer to you than any one on earth? would you not be well pleased to make her your wife?"

"Yes, I might be."

"That is enough, Gerard. Frances, come hither."

The conversation had been carried on in a whisper, and Lady Frances Chenevix came towards them from a distant window. Alice took her hand; she also held Gerard's.

"I thought you were talking secrets," said Lady Frances, "so kept away."

"As we were," answered Alice. "Frances, what can we do to keep him amongst us? Do you know what Colonel Hope has told him?"

"No. What?"

"That though he shall be reinstated in favor as to money matters, he shall not be in his affection or in the house, unless he prove sorry for his rebellion by retracting it. The rebellion, you know, at the first outbreak, when Gerard was expelled the house—before that unlucky bracelet was ever bought. I think he is sorry for it: you must help him to be more so."

"Fanny," said Gerard, while her eyelids drooped, and the damask mantled in her cheek, deeper than Alice's hectic, "will you help me?"

"As if I could make out head or tail of what you two are discussing!" cried she, by way of helping herself out of her confusion, as she attempted to turn away; but Gerard caught her to his side and detained her.

"Fanny—will you drive me again from the house?"

She lifted her eyes, twinkling with a

little spice of mischief: "I did not drive you before."

"In a manner, yes," he laughed. "Do you know what did drive me?"

She had known it at the time: and Gerard read it in her conscious face.

"I see it all," he murmured, drawing her closer to him; "you have been far kinder to me than I deserved. Fanny, let me try and repay you for it."

Frances endeavored to look dignified, but it would not do, and she was obliged to brush away the tears of happiness that struggled to her eyes. Alice caught their hands together and held them between

her own, with a mental aspiration for their life's future happiness. Some time back she could not have breathed it in so fervent a spirit: but—as she had said—the present world and its hopes had closed to her.

"But you know, Gerard," cried Lady Frances, in a saucy tone, "if you ever do help yourself to a bracelet in reality, you must not expect me to go to prison with you."

"Yes I shall," answered he, far more saucily: "a wife must follow the fortunes of her husband."

From the Dublin University Magazine.

THE MARVELOUS IDENTIFICATION.

A NARRATIVE OF FACTS.

BY A CONSTABULARY OFFICER.

NOVEMBER the 15th, 18—, I received a report from Constable Hanly, of Ballytoher station, to the effect that the house of a respectable widow, named Murphy, had been attacked on the previous night, and broken into by a party, two of whom were armed with pistols. The house had been robbed of a considerable sum of money, and the widow and her daughter severely beaten. The old woman had been treated in a barbarous manner. I lost not a moment in hastening to "visit the scene."

Mrs. Murphy was the widow of a man named Michael Murphy, who had been for several years a tenant to Colonel N—, of ——. He held by lease about twenty acres of land at a fair rent. When he died he left behind him the widow, a son about twenty years of age, and a daughter, not then eighteen, together with a small amount which he had hoarded.

No person was within at the time when

the outrage was committed, except the widow, her daughter, and a servant-girl. Her son, James Murphy, had gone to a distant fair, to sell calves, and had not returned.

On my arrival at the house, about half-past eight o'clock in the morning, I found the state of the poor widow to be very alarming. I cleared the house, and examined the daughter, who, after hesitation and weeping, stated that she knew one of the men, and he the principal. This was a young man named Thomas Courtney, of Cloongoon, and she could not be mistaken, as she had known him for years. She had taxed him with it to his face when he was beating her mother, and told him she would hang him for the murder. The servant-girl corroborated this as to Thomas Courtney; but neither of them knew the other persons who had attacked the house. Courtney happened to be a young man of the most unexceptionable character in the neighborhood.

I proceeded to the house of Courtney's father, accompanied by two policemen. It was a mile from the widow's; and on going in we found Thomas Courtney at breakfast with his father and mother, and a younger brother. They all stood up, and although there was evident surprise in their manner, there was nothing to indicate guilt or even confusion in Tom's appearance. "Welcome, your honor, welcome," said father and son, almost in a breath. "Sit down, your honors, and take an air of the fire; you're out early, and the mornin' is damp."

"No, I thank you, Courtney," said I. "The fact is, I have called upon business."

"Upon business, your honor; why, then, is there any thing the matter? Or is there any thing Tom or I can do for you?"

There was a freedom from any alarm in all this which it was painful to be obliged to dissipate. I asked Thomas where he had been all night? He said, at home; and father and mother both getting uneasy, declared they could swear he had. His brother Billy, who slept in the bed with him, said the same. I then told Courtney that he was my prisoner, charged with a serious offense, and I requested him not to say any thing. He would be brought before the magistrate, and it was better for the present that he should be silent.

"Silent!" he cried, dashing the chair upon which he had been sitting against the ground; "silent! I care not who hears what I say. I stand at the world's defiance; there's no person so black as can injure me: and even if I had not my father and my mother, and my brother Billy there to clear me, I have enough within my breast to tell me that I can defy the world. I shall be ready in one minute, sir," he added, in a calmer tone; and, going into an inner room, he returned almost immediately, with his great coat and hat on.

It were needless to pursue the scene which took place when the actual fact of his being about to be marched off forced itself upon his father and mother. There was all that clapping of hands and screaming upon the part of the mother, with silent and sullen preparation by the father to accompany him, interrupted with exclamations of "Whist, I tell you—will you hold your tongue, you fool!" ad-

dressed to his wife, which are usual on such occasions.

Before leaving the house I made search for young Courtney's clothes and shoes, for the night had been very wet, but I found them dry and unsoiled.

I then brought Tom Courtney away with me. He made light of any thing which could be brought against him; said he was certain, when he was brought face to face with his accusers, he could defy them, and seemed confident of being permitted to return with his father; told his mother not to fret, that he'd be back in a couple of hours, and to keep up her heart; but as we started she threw herself, in a state of distraction, upon the stone bench in front of the house, rocking to-and-fro with a sort of shivering moan, which it was piteous to hear, dying away in the wind, as we got farther from the door.

On my arrival at the police barrack with Courtney, I learned that the widow Murphy was in a poor state. The doctor feared there was a fracture of the skull. She was also seriously injured by burning. Within the last half hour she had in some degree revived, and recognized her daughter. I then sent Catherine Murphy and Winefred Cox (the servant-girl who had been in the house at the time of the attack) to my own head station, where I soon after brought the prisoner. I had sent a policeman across the fields to the magistrate, with a few lines in pencil to request he would come over as soon as possible, as I feared there had been murder done during the night; and I had not long to wait his arrival. He received the informations of the daughter and the servant-girl, both of whom swore in the most distinct manner against Thomas Courtney as the principal, and he was fully committed for trial.

The same day, James Murphy, having returned from a fair, came to me and detailed a conversation he had with Tom Courtney two days before the fair, of which more anon.

The third day the doctor told me the widow could not long survive. I lost no time, therefore, in sending for the magistrate. In less than an hour we met at her bed-side.

On being interrogated, she said: "I know that I'm going to die, and it's not of him I'm thinking, although he left my

poor Jemmy an orphan, and my little girl without a mother; I'd rather say nothing at all about it; I forgive him, oh! let me die with the comfort of forgiveness upon my heart. He must have been mad, for he wasn't drunk; but I'll not swear against him. I'm on my death-bed, and I'll take no oath at all. O Tom, Tom, I forgive you! and may the Lord forgive you as I do this day!" The magistrate told her she would be required merely to tell the truth before God. He considered she was bound in conscience to do so.

"Oh! I know that, sir," she replied; "and sure you can have the truth from enough without asking it from a dyin' woman; there is Kitty herself, and there's Winny Cox, didn't they both see him better than I did, and didn't they both tax him to his face? And sure he never spoke a word, for he couldn't deny it. O Tom, Tom!—Thomas Courtney, may the Lord forgive you this day! 'twas surely you and your party that murdered me. O Tom, Tom! avic machree, wouldn't I give her to you an' welcome before any boy in the parish, if she was for you; and didn't I often tell you, asthore, to wait and that maybe she'd come round? O Tom, Tom! if I wanted help isn't it to yourself I'd send; and to think that it was you, Tom, that came and murdered me and robbed me, and that it's on you I must lay my death at last? O Tom! I wonder will the Lord forgive you, if I do this day." Here she lay back, exhausted.

The magistrate who had written all that was necessary of what she had said, and put it into proper form, (I had written down every word precisely as she had uttered it; all through this narrative of actual occurrences I copy from my notebook,) then read it over to her, and she continued steadfastly to affirm that Courtney had been the leader in the attack.

November 19th, Constable Hanly arrived at my station early with an account that the widow Murphy died during the night.

"Well, Hanly," said I, "what is this you have to tell me now?"

"Why, then, sir, I'll tell you that. The very night the widow Murphy's house was attacked, the party called at the house of Phil Moran, who keeps a public-house at the cross-roads of Shroonene, and asked for whiskey. Moran, I hear, refused to open the door, and they

smashed it in, and made him give them the whiskey. Now, sir, Phil Moran is an uncle of Tom Courtney's; and, I believe, recognized him and spoke to him. I think, sir, this clenches the business, if it be true. And what makes me believe it the more, he left home ere yesterday mornin', after the widow died, and has not returned; but he let it slip the morning after it happened as a good joke, and before he heard of the attack, and then he drew in his horns, and now he's gone off."

Old Ned Courtney, Tom's father, was one of the higher class of farmers. He was a most respectable man in every sense. He had realized a few hundred pounds, which lay to his credit in the Branch Bank of Ireland. He was a favorite with the gentry, who used to shake hands with him at the fairs, and ask his opinion about stock. Thomas was his eldest son. Thomas was sent when a mere lad to a neighboring school, where he soon exhibited great parts; and ere three years had been accomplished, was fit to "blind the master" in the classics. He would argue with him, and *discoorse* him for a whole hour with an ingenuity that baffled, and an eloquence that astonished poor M'Sweeney—such was the master's name—while the younger scholars sat, with their mouths open and their "*Universes*" on their knees, whispering and nudging in wonder and delight, to see the master scratching his head with his left hand, while every moment he drew the thumb of his right across the tip of his tongue, and with a rapidity that almost eluded the quickest eye, (and Tom's eye was quick,) turned the leaves over and over, backwards and forwards, quoting a line here and there, as much as to say: "Why, thin, you young jackanapes, you, there isn't a line of it from cover to cover (the book had none) that I hadn't at my fingers' ends before you were born. 'Tityre tu patulæ recubans'—och bother—(another turn or two.) 'Oh! Formose puer nimum ne crede colori'—bah! can you translate *that*, Misher Courtney, eh?"

"You're out there, at all events, Mr. Mac, for I never had a bit."

"Well, you're as consated as if you had. Stan' up there, three syllables, will you?" and thus would half an hour's sparring take place between M'Sweeney and his pupil.

About this time, too—for Tommy was

now past sixteen (and it is extraordinary how early the Irish youngsters *take a notion*)—Tom Courtney fell in love with Catherine Murphy, the daughter of the widow Murphy, of Cortheen: she was a beautiful girl, somewhat about his own age. But, if my remark about the youngsters falling in love thus early be applicable to the boys, believe me it is no less true as regards the girls in Ireland—and, early as Tommy was in the field, he was not in time, for there was one before him, and Catherine refused to hear a word from him, point blank, though without telling him why. But he soon found out; and as he shortly afterwards changed the scene and manner of his life, and perhaps many of the feelings with which his boyish days were associated, he thought but seldom of Catherine Murphy. Tom continued, however, to go to M'Sweeny's school for another year, at the end of which he had learned more than M'Sweeny could teach, and "was quite all out and entirely"—to use the pedagogue's own words, "beyond his ingenuity or comprehension to resolve." Mr. M'Sweeny, therefore, called one morning on old Courtney, and told him "that he'd have to send Master Courtney to some other school, for that he could get no good of him—that in place of larnin' his lessons and houldin' his tongue, as a clever boy ought, and takin' the larnin' from him that was able to give it, it's what he was always intherrupin' him, startin' him questions, and meanderin' about books that he wasn't within a year and a half of."

It was decided that Tom should enter the Church, and he spent three years at Maynooth.

It was before the end of the third year that Courtney unexpectedly appeared at home, having nothing whatever of a clerical appearance about him, and unhesitatingly declared "that he never would go back to Maynooth, as he had given up all idea of ever going into the ministry—at least into —;" and here he stopped short, and would give no reason for any thing he either had done or intended to do.

After this interview it began to be pretty generally reported through the parish that young Courtney had turned Protestant—a circumstance which, as he had not been at mass since his return, was also pretty generally believed. On the

other hand, however, he had not been at church; but this was an extreme step, which, perhaps, he was not prepared to brave, if his views were even so decided or confirmed as to have prompted it.

Tom Courtney was tall. His glossy, dark hair grew in rich curls backwards from a broad and manly forehead, and contrasted with the marble whiteness of a long neck, which Byron might have envied. His eyes shone with a dark, but soft brilliancy which prevented you from being able to ascertain their precise color. His nose was straight and perfectly formed. His cheeks were pale—very pale—except at times when exercise or the excitement of debate or argument tinged them with a bloom which, for a moment, you thought rendered him handsomer than usual; but, when it was gone, you thought you were wrong, and that the pale cheek became him most. In disposition Tom Courtney had hitherto been considered a most amiable and benevolent young man; and his character for every thing that was correct and good had been proverbial.

Matters lay in abeyance for three months. It was now the middle of February; the assizes drew near, nothing new had turned up, and Philip Moran had not been heard of—a very damaging fact for poor Tom Courtney's case.

March 2d.—Hanly had found Philip Moran, at Carrickfergus, where he had fled to a friend's house. I brought him before the magistrate, with the view of having his informations taken. He refused, however, to be sworn, maintaining an unbroken silence. The magistrate explained to him the position in which he was placed if his evidence was against his nephew; but that, at the same time, he had a duty to perform from which he should not shrink; but Moran only compressed his lips the more closely, as if determined not to speak. The magistrate then told him if he continued to refuse, he had no course left but to commit him to jail. His only reply was: "God's will be done, I do refuse." A committal was then made out, and Philip Moran lay that night not four cells distant from his nephew in the county jail.

March 7th.—It was now the evening before the assizes, at least the evening before the trials. The Crown Judge, Sir William Smith, had arrived, opened the commission, given his charge to the grand

jury, and retired to his lodgings; the town was in a bustle; two sentries were measuring about dueling distance before the judge's door. The sheriff's carriage was rolling up the street; police, with their packs, were arriving in small parties from the distant stations; and lodging-houses and eating-houses were on the alert. Two of these police parties met from different directions at the head of the main street, when the following incident occurred: Constable Collert, with two men, plumped up against Constable Ferriss, with one man, at the corner of the street.

"Hallo! boys," said Ferriss, "where do you put up? let us stop together; Martin Kavanagh recommended us to stop at Frank Hinnegan's, a quiet, decent house, and no resort of any one but respectable people; come along with us, you'll not get cheaper or better lodgings in the town; come along."

"Ay," replied Collert, "so it is, but it's very far from the court and the parades; we're three to two against you, and come with us to Jemmy McCoy's, it's just as cheap and respectable a house as Hinnegan's, and not half so far from the parades. Hinnegan's, I know, is a clean, comfortable house, but it's an out-of-the-way place."

"Did you ever stop in it?" said Ferriss.

"I did, one quarter sessions," said Collert; "and, indeed, a cheap, nice house it is; but, I tell you, 'tis out of the way, so come away with us to McCoy's: the County Inspector is very sharp as to time—he's always on parade himself; I vote for McCoy's, 'tis quite close to our work, boys."

"Toss up for choice," said a young sub who had not yet spoken, "and let us all abide by the winner."

"Done!" said Ferriss, "though I am very unlucky."

"Agreed," said they all in a voice, and out came a halfpenny from Ferriss's pocket.

"I'll cry," said Collert.

"With all my heart," said Ferriss. Up it went.

"Head," cried Collert.

"You lost," said Ferriss, "it's legs; I won, for once in my life, boys; may be there's luck in that Manx halfpenny."

They all then adjourned to Hinnegan's lodging-house.

But why, you will say, drag in such

nonsense as this into the story, and at such a time? It is trifling and unnecessary. I reply: pray, reader, be not too hasty in passing an opinion upon apparently small matters. The incident is trifling, but it is not unnecessary.

March 9th.—Tom Courtney stood erect in the front of the dock, and never took his eyes off the clerk of the Crown while he was reading the indictment. When he had ended with the usual question of "How say you, are you guilty or not?" Courtney threw his eyes, as it would appear, through the vaulted roof up into the very heaven, and replied, in a voice which was not loud, but which, in its beauty and distinctness, was heard by the farthest individual in the court—"Not guilty, so help me God, in this my great extremity," and he leaned forward, faintly.

Mr. B——, the famous counsel, was assigned to the prisoner.

The trial commenced with an able statement from the counsel for the Crown. Catherine Murphy was the first witness. She stated, that on the 14th of November she was in her mother's house. Her brother James was absent at a fair; some time after midnight there was a loud knocking at the door; witness got up, and put on her clothes; was greatly frightened; her mother told her not to speak. Winny Cox slept on a loft over a small room that was off the far side of the kitchen; Winefred Cox got up also, while the knocking was going on, and just as she was coming down from the loft, the door was smashed in upon the floor, and two men entered. They lit a candle at the fire; knew the man that blew the coal; knew him when the light of the coal was flaring on his face, as well as after the candle was lit; could not be mistaken, as she knew the prisoner from the time they were children, and her heart jumped up when she saw it was Tom Courtney. The men were armed with pistols; they came to the bedside where her mother lay; one of them seized her by the arm and made her sit up; on her oath, it was the prisoner, and "it's at his door I lay my mother's death."

There was here a sensation and murmur through the court; but, after a few moments, the examination was continued.

"Witness knew the prisoner for many years; he was son to a neighbor; is positive that he is the man; the prisoner demanded where the money was; her

mother denied that she had any money in the house; the prisoner then struck her with the end of the pistol; knew that her mother had a small box with some money in it; thinks about fourteen or fifteen pounds besides some silver, but did not know where she kept it; if she knew, she would have told the prisoner at once to save her mother; told her mother, for God's sake, to tell him where it was, and let all their bad luck go with it; her mother replied: 'Never: Tom, you're the last man breathing I thought would do me an ill turn, and only for you struck me, I'd think it was joking you are, or through liquor, what I never saw on you yet.' They then dragged my mother out of the bed, and brought her into the kitchen, where they struck her again, but she would not tell; they drew out the rakings of the fire upon the hearth, and threw her down upon them; the prisoner held her under the arms, and the other man pulled her legs from under her; witness then roared murder, and seized the prisoner by the throat; called the prisoner by his name, and said, 'Tom Courtney, I'll hang you as high as the castle for this night's work;' he gave witness a blow which staggered her over against the wall and said, 'Give up the money before there's mischief done;' her mother was screaming very loud. When they first threw her mother down upon the coals, Winny Cox jumped down off the loft and grappled with the second man; with Winny's help, and what witness could do after she got the blow, her mother struggled into the middle of the kitchen-floor, and said, 'Give them the box, Kitty, it's in the little press at the head of the bed,' and she fainted off. They then departed, leaving her mother, as she thought, dead; saw the notes in the box when the prisoner opened it; there was also a purse in the box with some silver in it, which belonged to witness herself; would know it again if she saw it amongst a thousand—a good right she'd have, 'twas the prisoner himself gave it to her, about four years ago; it was a leather purse, lined with silk, and there were letters upon it; witness gave it to her mother to keep for safety; did not know the second man that came into the house."

This witness was cross-examined at much length by Mr. B——, principally as to her former intimacy with the prisoner, but nothing was elicited.

Winefred Cox was next examined, and she corroborated every syllable that had been sworn to by the first witness in its most minute particulars: heard Catherine Murphy say, "Tom Courtney, I'll hang you for this night's work, it's often my mother nursed you, to murder her at last;" knew the prisoner for many years, and could not be mistaken.

Philip Moran was then sent for to the witness-room, and put upon the table, and here there was a very painful scene indeed—not a being in court whose heart did not beat.

Moran never raised his eyes, never opened his lips; he moved not; he did not appear to breathe. The clerk of the crown held forth the book and told him to take it, but his arms seemed as though they were dead by his side. The counsel for the crown rose, and addressing his lordship, said: "My lord, this is a most material witness, and however painful the position in which he stands towards the prisoner, and in which we stand in being obliged to bring him forward—for I understand he is his uncle—the case is one of such magnitude in itself, and so peculiar as regards the unfortunate man in the dock, that we feel it imperative upon us to establish it by the mouths of many witnesses. The prisoner, I understand, has hitherto borne a most excellent character, and I am aware that such will be attested here this day by many most respectable persons; but this very fact, my lord, only makes it the more incumbent upon us to fortify our case by all the evidence we can fairly bring to bear upon it, in order to satisfy not only the jury, but the public, beyond the shadow of a doubt, as to the guilt of the prisoner."

"I have no doubt he will give his evidence," said the judge. "Witness, listen to me." Not a move—not a stir.

"Witness, pray direct your eyes towards me, while I address a very few words to you," continued the judge.

Had he been made of marble he could not have been more immovable—death could not have been more still. I think the judge thought he must have been in a fit of some kind, for he seemed perplexed, and I heard him ask, in an undertone, if the medical gentleman who had charge of the jail was in court, and directed him to be sent for. In the mean time he again addressed him by saying: "Witness, I am quite certain you must hear what I say, at

least I shall take it for granted that you do: your present course can not avail you, the law must be vindicated, and however painful it may be to you, you must give your evidence, or should you persist in refusing to do so, I shall have no course left but to commit you to prison, and that, let me add, indefinitely."

Still not a word—not a move. Here the prisoner started up from the position he had all this time maintained, and called out: "Uncle Philip—Uncle Philip, won't you speak to me? You will—you *must*."

This seemed to act like magic on the witness, for he turned quickly round and gazed his nephew in the face as he continued: "Uncle Philip, take the book and give your evidence like a man—what are you afraid of? Think you not that your unwillingness to tell the truth must be construed into an unwillingness to injure me; may it not—may, must it not—impress the jury and the public as clearly against me as any evidence which you can give? Uncle Philip, there is but one consideration which should tempt you to hold out in this manner, and that is a consciousness of having been induced through any influence, to be about to state that which is not the fact: if that be the case, you do well to pause. But no, it is an unworthy thought, and I ask your pardon; the love you have borne my mother and myself, and the whole course you have adopted in this melancholy business, forbid the supposition." Here the prisoner was completely overcome, and again covering his face with his hands, he writhed in the agony of distress—'twas the word *mother* that unmanned him.

I have been for upwards of thirty years in the habit of attending like places, and I never witnessed such a scene.

Presently the prisoner regained his self-possession, and "proudly he flung his clustering ringlets back," and continued: "Rouse yourself, Uncle Philip, take the book and give your evidence; I know you will swear nothing but what you believe to be the truth."

"'Tis a difficult thing, Tom," said his uncle, turning round, "and for all I have to say, it isn't much."

As he took the book, I heard Tom Courtney say: "God help you, Uncle Philip; they might have spared you this, for they have enough."

Philip Moran was then sworn and ex-

amined: kept a public house at Raheen; on the night the widow Murphy's house was attacked, very late or towards morning, some persons called at his house and asked for whisky, refused to give it to them at that hour; they said they were travelers and were very wet, that they should get it; looked out through the window, saw three persons, it was a moonlight night, but very wet; thought he knew one of the men who stood a little to one side; told them to go home, that they could be no strangers; one of them swore they would smash in the door if it was not opened, but that they had plenty of money, and would pay well for the whisky; thought the easiest way to get rid of them was to give them the whisky; lit a candle, and drew half a pint; did not wish them to come in, and brought it to the door, which he opened; two of them stood inside, and said it was a shame to keep them so long in the rain, because they were strangers. Witness turned the light of the candle upon the man who stood outside, looked sharp at him, and said, "There's one of you no stranger at all events, Tom, what's the matter? won't you come in and dry yourself;" he made no reply, and witness said, "You had better go home, Tom, as fast as you can;" knew Tom Courtney since he was born; is his uncle by his mother; the prisoner came no nearer, at any time, than where he first stood, about four yards.

This witness was then called upon by the Crown to state positively whether the prisoner was one of those three men, or if he had any doubt. He was positive the man who stood outside was the prisoner; he did not know either of the other men, they were strangers.

This witness was cross-examined with great ingenuity, principally as to the dress which the prisoner had on; whether it was that usually worn by him, and the opportunity he had of distinctly seeing his face. Upon the whole this cross-examination was not unsuccessful of a rather favorable impression towards the prisoner.

As the old man turned to go down, his eyes met those of his nephew. They were within four feet of each other, and Moran, having gazed at him for a moment, threw his arms and shoulders across the rails of the dock, and clasping him round the neck, he cried: "O Tom! forgive me; but I could not wrong my soul."

"Stand back, Uncle Philip," said Court-

ney, "you'll drown me with your tears. I know you have sworn what you believe to be the truth, and I would disown you if you would do any thing else—even to save my life."

He then staggered down, or rather was helped down, and you could have heard his sobs dying away in the distance as he was supported out of the court.

James Murphy was examined, and stated that Courtney casually had met him on the road, some days before the attack, and advised him to go to the fair to sell his calves, as it was an excellent market.

The widow Murphy's dying declaration was then read, when a murmur of surprise and indignation ran through the court. Persons who had hitherto felt inclined to sympathize with the prisoner, began now to look upon him as a hardened and hypocritical ruffian.

The case for the prosecution closed.

The leading witness for the defense was Courtney's brother, Billy, a handsome lad: "Recollected the night the widow Murphy's house was attacked; slept on that night in the bed with his brother. Witness and the prisoner went to bed about ten o'clock; locked the house-door, and hung the key behind the parlor-door; the prisoner got into bed first; he slept next the wall, and witness slept on the outside. Prisoner and witness both said their prayers before they got into bed. The prisoner was in the bed in the morning when witness awoke. Turned two or three times in the night, and, on his solemn oath, the prisoner was in the bed on all these occasions."

Cross-examined by Mr. F——.

"The prisoner had other clothes in a box in the same room; could have got them without touching those on the chair."

"Could he not have left the house, then, without your knowledge, sir?"

"'Tis just possible; but I am positive he never did."

"Do you mean to swear, sir, that he did not do that which it was possible he could have done without your knowledge?"

"I'll tell you——"

"No, sir, you'll tell me nothing until you give me a direct answer. I ask you, sir, again, and for the last time, will you take it upon yourself to swear that the prisoner did not leave the house that night after you and he went to bed?"

"I will not swear it positively."

"You may go down, sir."

"You were going to say something just now," said the judge.

"I was going to say, my lord, that I would not swear positively to any thing which I did not actually know to be a fact of my own knowledge; and in this case, although I am quite satisfied in my own mind that the prisoner did not leave the house on that night, yet as the possibility does exist that he could have done so, however safe I might believe myself to be in swearing it, I think it would be wrong to do so."

"It is a very honest answer, my good boy," broke in Mr. B——, "and stamps truth upon every tittle of your evidence."

The witness here became much affected; his eyes filled with tears, and the corners of his mouth worked and twitched with emotion. He put a handkerchief to his eyes as he turned to go down—more, I think, to hide his brother as he passed than to check his tears; but the prisoner stretched out his arms, and grasped him by the shoulder as he passed, saying:

"God bless you, Billy, you're all right, man—you're all right. Forgive me if I was afraid of your love."

Billy then rushed through the crowd, carrying the sympathy and belief of every one who heard his evidence with him.

The only other evidence which was brought forward was as to character, and certainly if it could have availed in opposition to the flood of evidence which was against the prisoner, he would have been turned from the dock a free man; the highest and most noble in the county, one and all, bore cheerful and distinct testimony to the amiability and uniformly good character and conduct of Tom Courtney; the priests (for they still claimed him) thronged forward to the table, to bear witness to his benevolence and kind-heartedness, from a very child—and the case closed.

The judge slowly turned himself round towards the jury, and made a very long pause—so long that it became at last the subject of whispers from one to another, and I heard some one say that he was only waiting for the buzz (which always takes place at that moment in a crowded court) to subside—but I did not think it was.

He commenced, however, and it was the signal for death-like silence. I shall

not follow him through his charge; he left no point of view in which he did not put the case. I shall never forget his voice, his views, his periods. He closed, and during the whole of his charge he never once used the words, "on the other hand, gentlemen," (alas! there was no other hand to turn to;) nor did he close with that general and hackneyed finale to all charges, "if they had a doubt, a reasonable doubt," (and it was a termination of which his humanity rendered that judge particularly fond;) but in this case he seemed to feel—the whole court felt—that it would have been out of place; and his closing words were: "I leave, then, the case with you, gentlemen; and I do so with a firm persuasion, that as upright, conscientious jurors, you will do your duty without respect to persons, and fearless of the result, founded on the evidence, and the evidence alone, which has been brought before you."

Oh! what a hum—what a buzz—what whispering, and wiping of faces, what altering of elbows on the ledges of the seats, what slight shaking of heads and compressing of lips, as people looked in each other's faces while the jury rose to retire; and "Poor young fellow;" "God help him;" "Unfortunate mother;" and such like remarks, passed in an undertone from one to another. I lifted up my heart in silent prayer to God that he would indeed help both him and his mother in that distracting, frightful hour. Not a man, not a woman, not a child—and there were children there—left the court, although there were numbers who had not tasted food for nearly twelve hours; such was the awful suspense, the dreadful anxiety to learn that which every person there knew to as great a certainty as that the sun which had been some time set, would rise again in the morning.

Contrary to all expectation, the jury remained in for nearly half an hour—not that they doubted, (as I learned afterwards,) but from a sheer reluctance to hand in the fatal word. Indeed it was the good sense and humanity of one of the jurors which prevented them from giving further delay, (such was their repugnance,) by representing that every moment they remained in beyond what was reasonable, in so plain a case, was only calculated to nourish a vain and delusive hope in the prisoner's breast, and lead him to the belief, that it was possible to take a favor-

able view of the case. The justice, the humanity of this was at once acquiesced in; and the jury-room door opened, and forth came a reluctant but conscientious jury. The issue paper was handed down. The clerk of the crown read over the names of the jurors, and read aloud, though his voice trembled as he uttered it, the awful word, "Guilty," adding the useless, but usual words, "have you any thing to say why sentence of death and execution should not be passed upon you?"

The prisoner, on hearing the word "Guilty," had brought his hands together, stretched his arms along the front rail of the dock, and laid his head down upon the backs of his hands. In this position he remained evidently struggling with inward emotion. There was a death-like silence then, indeed, in the court, as there always is immediately previous to the sentence of death being passed. At length the judge—who had been gazing at some imaginary object in the air—said, "Prisoner."

At the word, the convict, for such, indeed, he now was, started up into an erect position, and pushing back his long dark hair, which had fallen down over his forehead and eyes, showed a face of marble whiteness, but an unstirring eye of surpassing beauty.

"Prisoner," said the judge, again.

"My lord," said the prisoner, "I have been asked if I have any thing to say why sentence of death and execution should not be passed upon me. If the question be not altogether an insult or a mockery, may I be permitted to say a few words to the Court—not, I am aware, that they can have any influence upon my fate, but, my lord, that they may be remembered when I am no more;" and his lips quivered.

The judge made no answer, rather permitting him to proceed, than giving him permission.

"My lord, I have been found guilty of a crime of which I am as innocent before heaven as any person who now hears me or looks upon me, standing here, in the eyes of the law, a convicted murderer, and about to receive sentence of death and execution—oh! terrible, terrible words. There may be eyes now looking at me, there may be ears now listening to me, of those who know and who could prove my innocence, even at this moment. If such there be in the court, [and the pri-

soner turned round and surveyed the crowd in rear of the dock,] let them behold me—let them listen to my words. Of course, my lord, I allude to the real perpetrators of this horrid crime, should any of them be here, and which is not impossible. Do I expect, then, that if they be, they or any of them will stand forth and avow it? Alas, no! I have no such hope; 'tis not in human nature; and the hearts which would perpetrate such a cruel deed will be but too glad to chuckle in the security of my conviction." [Here there was a great bustle in the center of the crowd behind the dock, and a strong-looking man, who had fainted from the heat, was removed into the street, where the fresh air soon revived him; but I do not believe he returned into the court, and I heard some body say that he was a stranger.] "They may hear," continued the prisoner, when silence was restored, "from the lips of a dying man, that they are about to commit another murder, and that, sooner or later, justice will overtake them, and my character will be redeemed, and my memory rescued from disgrace and shame—perhaps ere I be rotten in the grave."

Sir William knit his brow, and seemed as if he would have stopped him. He at once perceived it, and added:

"Pardon the expression, my lord—this is not a time for choice of words; but if I have used an undignified or improper expression while addressing your lordship, pardon me, I pray, and attribute it rather to the agony of the position in which I am placed, than to any want of respect."

The judge appeared satisfied, and the prisoner continued:

"My lord, I can not, and I do not, while asserting my innocence, quarrel with either your lordship's charge, or with the verdict of the jury; I do not even know how to quarrel with the evidence. I never injured any one of the witnesses; on the contrary, I had far other feelings at one time—perhaps far other objects than injury towards one of them. I can not, and I do not, believe that Catherine Murphy's poor old mother—her murdered mother—and my heart still bleeds at the contemplation of her sufferings and death—I can not believe, I say, that she rushed for judgment to her God with a perjured lie upon her lips; I can not believe that either she or Catherine has sworn what they knew to be

false. I can not believe that James has turned an innocent and casual conversation against me for a wicked purpose, knowing me to be innocent. He, at least, my lord, has sworn the truth. I freely admit the accuracy of the conversation detailed in his evidence; it was a casual matter, with no other object than to serve him, and founded upon the success of my own father upon similar occasions. Besides, were my object that which has been attributed to it, might I not as well have said to James Murphy: 'James, I wish you would go away to the fair of G— on Thursday next, for I want to murder your mother on that night,' as have acted the subsequent part I did, had such being the object of the conversation which actually did take? Who but a fool would have held such a conversation with him, had he not made arrangements to fly with his booty before he returned? Did I fly? You have heard where and how I was found. Intimately known, as I was, to the widow, to Catherine, and the servant girl, undisguised to have entered the house, and committed murder and robbery, and then returned to my own house, not more than a mile distant, sat down to my breakfast, and calmly waited the result; could I, I say, have courted an ignominious and shameful death more openly, more successfully, more promptly, than by such a course? But I have not alluded to my uncle. Can I believe that Philip Moran—the only brother of her whose heart I now see breaking almost beneath your lordship's bench, and which, I doubt not, in mercy, may be cold before my own—can I believe that he would join a foul conspiracy to take away the life of an innocent man, and that man his sister's son—a conspiracy, too, the success of which must be purchased by multiplied perjury of the deepest dye, and for which no depth of ingenuity can divine a motive? I can not believe that he or they have done so. What shall I say, then?—that I am guilty? No, my lord; as I stand before the God of heaven, who knoweth my heart, I am not guilty."

The convict here paused for a moment, and turned his head towards one of the side-boxes below him.

"I have just heard a remark, my lord," he continued, "expressing surprise that I did not address this statement to the jury before they retired, rather than to the

Court after the verdict. I doubt that the law would have permitted me to do so; but I do not doubt the futility of such a course, neither does the gentleman who defended my case; else, had he not been silent, were it lawful; had I been permitted, I should have declined to do so. And why? Because I felt the impossibility of any thing which I could say to contend against the evidence, and whatever I set forth must have been received by the jury and the public as false and hypocritical, coming at such a time, in the vain and delusive hope of swaying men's minds in my favor, and I should but too surely have added the brand of liar to that of murderer upon my name. It may not be so now, the die is cast—my doom is sealed. That short word, written in silence by your foreman, and spoken aloud by the officer of the Crown, has removed my case into a higher court. I stand now not so much before your lordship as before the Lord of heaven. At his tribunal I must soon appear; and falsehood, which could never have availed to save me, would be worse than useless now. I may, therefore, hope there are some, at least—perhaps many—here, who will believe my words, when I again declare, in this awful moment, that I am wholly innocent of act, part, or knowledge of this dreadful crime. I believe, my lord, that an inscrutable Providence, whose ways are past finding out, has permitted—for some mysterious purpose, which neither you, my lord, nor I can scan—a fatal delusion to fall upon the minds of all those who have this day witnessed against me. He has the power even still to dispel it; and should he hasten his mercy in time to save me from a cruel and ignominious death, how shall I live to thank him—to serve him? but if not”—[Here the unhappy man exhibited great emotion; his lips quivered, his voice trembled, and his whole frame shook.] “But if not,” he continued, recovering himself, “and that my doom in this world shall, indeed, be fixed, I trust I can say, ‘His will be done;’ but, for the sake of my memory and my character, and for the sake of those who loved me here, I hope and trust he will reveal it when I am gone.”

He paused, and the judge, thinking he had finished, put his hand behind him, doubtless for the purpose of assuming the black cap.

“A very few words more, my lord, and I have done. I doubt not that your lordship will tell me that you perfectly coincide with the propriety of the verdict, and that no person who has heard the evidence can for a moment have a doubt of my guilt. Perhaps your lordship may tell me that a solemn declaration of my innocence in opposition to such evidence is only a fearful aggravation of my guilt; and although I can not, as I have already said, upon that evidence, quarrel with either the verdict or with that opinion, I once more, and for the last time—at least before your lordship—assert my innocence; and further most solemnly declare, that were an admission of my guilt to purchase the life which I must soon resign for a shameful, sudden, and, perhaps, a painful death, and to turn me, free and unshackled, from this dock, while my name and character were blasted with the crime, I would not, for I could not, truly make it. The Lord has laid his hand heavily upon me; it is a sore affliction which I can not comprehend, but which must take its course. May the Lord lighten the load, or increase my strength to bear it; to him I commit myself, soul and body. My lord and gentlemen, I have done, and I thank you for the patience and attention with which you have listened to me.”

The prisoner ceased, but not a word, not a whisper, not a stir in court. All eyes turned from the unhappy man to the judge, who, after an apparent consultation with his own mind, assumed the black cap with a trepidation very foreign to his usual mode. All persons present seemed to expect a long and, doubtless, a very feeling address to the unhappy convict, ere the final words of the sentence should close his earthy fate; but I never saw Sir William Smith so completely, so perfectly overcome. He made one effort to speak, in vain, and it was evident he would not make a second until he had mastered himself, and could command his voice. I had, too, a secret feeling that he believed in the innocence of the prisoner. After a prolonged and painful silence, he merely said:

“Thomas Courtney, I have listened with all the attention which I considered your unhappy position demanded, to your statement. Every person in the court, as well as the jury, has heard the evidence upon which you have been convicted; and in

the justice and propriety of that verdict there is not one solitary person who must not concur—nay, you yourself have done so. They have also heard your statement; and whether that statement be an aggravation of the crime or not, I shall leave to be settled by the final and eternal Judge before whom you soon must appear. I shall only add, that if your statement be false—and I cannot reconcile its being otherwise, with the evidence, if it be true—you will find, perhaps, when too late, that it will be a dreadful aggravation, indeed.”

He then sentenced Tom Courtney to be hanged by the neck till he was dead, in the usual words, upon the next day but one following. The miserable man was then removed from the dock to the jail, amidst all the customary clamor and screaming of relations and friends.

The court was adjourned, and in one hour the town was as quiet as if nothing beyond the conviction of a petty sessions had taken place.

The weather was very fine and dry for the time of year, and Sir William, to the surprise of every one who had witnessed all he had gone through that day, directed the sheriff to have an escort ready in one hour from the closing of the court; and having made arrangements with his brother judge, (who had nothing to do in the record court,) he left for the next town on the circuit, by a clear, fine moonlight.

It was by this time very late; and as I felt harassed and fatigued both in body and mind, I retired to my lodging alone and depressed. The evening wore on: in a state of distraction I retired to rest, and soon fell into a confused slumber. How long I slept, or half-slept, I know not—at least I did not know until I was awakened by a thundering double-knock at the hall-door. I had an instinctive feeling that it was for me, and jumping up, I put my head out of the window, and asked: “Who was there?”

“Oh! come down, sir; come down as fast as you can,” said Ferriss, who, with another policeman, stood at the door.

“Why, what is the matter, now, Ferriss?” said I.

“Oh! come down, sir; dress yourself smart and come down, sir, and I’ll tell you.”

Of course, I lost not another moment in dressing myself and going down. As I passed the clock on the landing place, I

saw that it was not far from two o’clock. Something serious, I was certain, had happened, and I felt a dreadful presentiment that Ferriss’s news was, that Tom Courtney had put an end to himself. Judge of my astonishment, when I opened the hall-door, and his first words were, that Tom Courtney had made his escape from the jail, and that he had again arrested him in a public-house in the town.

“Quite and entirely impossible, Ferriss,” said I: “on every account impossible, out of the question.”

“Quite true, nevertheless, sir,” he replied. “I have him in the police-barrack, not forty perch from where you stand: and, what’s more, I have one of the fellows that was with him at the widow’s house, and who, I am sure, assisted him to make his escape. You remember the red-haired thief that Kitty swore she’d know again.”

“You’re dreaming, Ferriss; ’tis, I say, quite impossible; I can’t, and I don’t believe it.”

“And why not, sir? Why wouldn’t he, if he could? And, faith, if it wasn’t for Edmund Ferriss, he was a free bird before morning. Come down to the barrack, sir, yourself, and see him; may be you’ll believe your eye-sight.”

“Scarcely,” said I. “What did he say, Ferriss, when you took him? How did you know he got ont? Where did you find him? Does he now admit his guilt?”

“He never opened his lips since I took him; but I heard him and his companion talking the whole business over of the attack, and how well they escaped. There can be no doubt of his guilt now, at all events. Oh! then, what a sweet tongue he had, sir. Did you hear him to-day—faith, I believe I may say yesterday—why, he had me almost persuaded, at one time, in spite of every thing, that he was innocent.”

We hastened to the barrack. As I entered the day-room, I there beheld Tom Courtney, sitting upon a form, handcuffed to another man, and a policeman on either end guarding them. He had changed his clothes, but did not appear to have had time to cut his hair, or otherwise disguise himself. There was a ferocity in his eye, and altogether in the expression of his countenance, I had never before seen, and which I did not conceive it capable of assuming. I looked him full in the face, and said:

"God help you, Tom Courtney; what is this you have done?"

He did not return my gaze, and he replied not.

Looking upon him from that moment as a condemned and hardened hypocrite, I turned from the room, and gave directions that no person whatever should be permitted to speak to him, or he to any one. I then brought Ferriss with me to Mr. —, the magistrate, whom I routed up as unexpectedly as I myself had been. As we went along, and while we were waiting for the magistrate to dress, and reconcile himself to so untimely a visit, Ferriss gave me the following account of Tom Courtney's second arrest.

He and his companion had retired to their lodgings rather tired and harassed, after the duties of the day. Their room was off a long narrow one which was used as a tap-room. There was, however, another door leading into their room from an outside passage, up three little three-cornered steps, which door was generally used when there was company drinking in the tap-room; but on this occasion it was very late, and as there were no persons in it, Ferriss and his comrades passed through it into their sleeping-room, and were retiring to bed. There was a chink of the door between the two rooms open. Ferriss's companion had got into bed, and he himself had taken off his clothes, and had just put out the candle, when he heard the door of the outside room open, and steps advance into it, and he saw a light. Now, Ferriss was a cautious, sensible man, where business or duty was concerned, although a smart, pleasant fellow, where it was not; he never did any thing in a hurry, and therefore seldom did it wrong; and, in this instance, he thought it was just as well to take a peep through the chink previous, as he thought, to stepping into bed. But Ferriss did not go to bed that night, near as he was to doing so; for, as he looked out, if ever he saw mortal man, he saw Tom Courtney sitting at the end of the table, directly opposite him; the candle shone right upon him—full on his face—he could not be mistaken. There was another man sitting sideways to the table, but turned round towards Courtney so that he could not see his face. But it was no matter; he saw Tom Courtney beyond a doubt; nay, if a doubt could have existed—which, under the circumstances, might have been natural—it was dispelled

by the following conversation, every word of which Ferriss drank in *erectis auribus*, with more than ordinary surprise.

"Well, Tom, my boy—for I can't help calling you Tom, though you bid me not—I hope I may congratulate you now, at least, on your escape from the halter, eh? Don't you think you may say you are safe? Give us your hand, old boy."

The other looked at him with a contemptuous curl of the lip—Tom Courtney's curl all over, and letting him take his hand, rather than giving it to him, replied:

"Yes, I hope we are safe, perhaps, from that job; but recollect, Martin, there are other things to the full as bad, if not worse, than the widow's; and the sooner we can get clear out of the country the better. My heart misgives me that there may be some mischance yet."

"Your heart is quite right for once, my lad, at all events," thought Ferriss; but he would not stir for the world until he heard more. "He was," as he said himself, "in the receipt of a bagful of information of the right sort."

"Don't be down-hearted, man," continued Martin; "here's the girl with the whisky."

It was just then brought in and laid on the table, and the girl left the room.

"Martin, you have no right to call me down-hearted. Recollect to-day, didn't I stand it like a man. It would be more like the thing if I called you a chicken-hearted coward; you were very near spoiling all."

"Well, well," interrupted the other, "you said enough about that already, and I told you I couldn't help it. The recollection of the poor widow Murphy's screams and the blood upon her gray hairs and face, and the way that *you* spoke, Tom, and wanted the people to stand back, that I might be seen, was too much for me, and the place was so hot, and altogether I could not help it; but it's all over now, and you promised you would not bring it up again; so no more about it. But let us hear your plan, Tom, what is it?"

"Just to drink my share of this half-pint, smoke a pipe, and be the best half of the way to Galway before daylight—will that do?"

"Right well; here's to you and me; there's not another man in Ireland would have escaped as you have."

They drank and helped themselves again.

All this time Ferriss was stealing into his jacket and trowsers like a mouse, and listening and peeping at the same time. He was glad to see what no man ever saw before—Tom Courtney charging a pipe, and preparing to smoke. This was nuts and apples to Ferriss: it was his time for business, and of all men in the force he was not likely to spoil a job by hurry. He therefore stole over, and very gingerly awakened his two comrades, and whispered to them:

"For their life not to open their lips or make a noise, but to dress themselves as smart and as quietly as possible. And," he added, "our fortunes are made."

This having been accomplished—not the making of their fortunes, but the dressing themselves—he told them who was in the outside room, and sent them in their *stockin'*-feet, but with their bayonets, through the little door of which I spoke to the outer door of the drinking-room, to prevent the escape of the men, and with directions to stand fast until they heard him inside. All being arranged as he directed, he returned to his former position, and taking a final peep, he saw Tom Courtney and his companion puffing away. Need I say, what next? Ferriss, throwing open the door, rushed like a tiger upon Tom Courtney, and gripped him by the throat; the other two men sprang in with drawn bayonets. There was a fearful struggle—'twas for life or death—and Courtney and his companion fought like persons who knew and felt what the result of defeat must be; but Ferriss and his comrades were no light customers, and the odds being in their favor, both as to numbers and being armed, (although they did not inflict any injury with their bayonets,) Courtney and his accomplice were ultimately overpowered and handcuffed, and in a very short time after were lodged in the police-barrack, where a strong guard was placed over them.

When Ferriss had finished the recital from which I have put the above into a form of detail, he pulled out an Isle-of-Man half-penny out of his pocket.

"Do you see that, sir?" said he, holding it on the palm of his hand in the moonlight.

I did; it had three legs kicking every way upon it.

"I wouldn't take a five-pound note for that half-penny; I never won a toss but the one I won with that, and it was the

means of my taking Tom Courtney, for the Tubberculen boys and us tossed up to see where we'd stop in town; we were for Hinneagan's, and they were for M'Coy's; if I lost the toss we'd have gone to M'Coy's, and Courtney was clean gone forever."

We were standing at the hall-door all this time, waiting for the magistrate. The door was at length opened, and we went up stairs to the drawing-room. I told him that Courtney was, indeed, a villain and a hypocrite; that he had made his escape from the jail, with the assistance of an accomplice; that Ferriss had overheard him fully admit the crime, and boast of how he had escaped; but most fortunately he had been enabled, with the assistance of his comrades, to apprehend them both in the lodging-house, and they were then under a strong guard in the police-barrack. I found it just as hard to persuade Mr. — of the fact as Ferriss had found it to persuade me; but he came up to the barrack and was there perfectly satisfied of the whole thing. Like myself, he asked him one or two questions, and receiving no answer, turned away. We determined, then, to remain up all night till the jail should be open in the morning, and we brought Ferriss back again to the magistrate's lodgings, where we took a very full statement from him, in writing, of the conversation and arrest of Courtney and the other man; and if a person could enjoy any thing at such a time, we almost did enjoy the idea of the governor's distraction, when he first heard of Courtney's escape, and his face again, when we should inform him that he had been retaken. Musing and thinking on these things, we turned our steps towards the jail long before the usual hour for its being opened, or the officials ready for business. When we turned the corner, early as it was, we saw the governor standing at the outer gate, with his hands in his black velvet jacket-pockets, and his head down.

"He does not look as if he had heard it yet."

"Oh! he must," said Mr. —, "look at him."

We approached him; there was nothing of excitement or hurry about him: rather a melancholy sadness, as he returned our "Good morning, governor."

"This is a bad business," said Mr. —; "but it might have been worse."

"Worse, sir! my God, sir, how could it be worse? The poor young fellow!"

"Poor young fellow! How so! He might have escaped altogether; he was within a snap of your fingers of being off."

"Escaped! being off!—what do you mean? Ah! no, no, poor fellow, I am quite certain he would not have moved a step, if the gates were open all night, and that it was to save his life."

Mr. — and I looked at each other; we did not suppose he had heard a word of what had happened.

"Was it late last night when you saw him? Or when did you see him last?" said I.

"Poor fellow, I have but just left him, and notwithstanding all the evidence, I declare to Heaven, gentlemen, my opinion is, that if ever a man was hanged in the wrong, that man will."

"What," cried Mr. — and myself, in a breath; "do you, indeed, say that he is here—that he has not made his escape?"

"O gentlemen! this is no time for joking; I am not able to bear it—indeed, I am not, and I did not expect it from either of you. Ah! poor fellow! I never saw so reconciled a creature. He says, but for his mother he could bear it all. Poor fellow! God help him."

"Indeed," said I, "we are not joking; it would be worse than cruel to do so at such a time; but you must be mistaken, for beyond a doubt, Tom Courtney did make his escape last night, and has been retaken with one of his accomplices, by some of my men; they will be here in a few minutes. One of my men—Ferriss—even heard him confess the whole business, while talking to his accomplice."

The governor looked at me as if he thought I was mad, and then at Mr. —, to see if he would confirm what I had said. Mr. — saw the state of excitement he was getting into, and said:

"When, indeed and in truth, did you see him last? This is most extraordinary!"

"Not ten minutes ago; why, I tell you I had but just left him not five minutes when you turned the corner, and came towards me; but come and you shall see him, yourselves, this moment, poor fellow. God, I say, help him; indeed, he has helped him wonderfully, for I never saw so reconciled a creature—he's like a lamb; come, gentlemen, and satisfy yourselves."

And, as he turned to lead the way, I saw, what I had never seen before, tears trembling in the eyes of the governor of a jail. I confess I had my doubts, as I followed him, of the state of his mind at that moment, as I felt confident of the impossibility of his showing us Tom Courtney. We arrived at the cell-door, and my heart beat violently—I knew not from what cause. The governor unlocked the door, and we entered; there sat the real, true Tom Courtney, as innocent before the Lord and his country of the murder for which he had been condemned as the newborn lamb. We had cautioned the governor on no account to make any allusion to the subject of our previous conversation; and having merely paid him a short visit of apparent sympathy, we left the cell.

On our return to the outer gate, the police were just coming in with the prisoners, and as they passed into the ante-room for examination, the governor actually started; he pinched my arm, and, turning aside, he said,

"My God, how perfectly alike—I see it all; it must be the case."

The truth had flashed upon us when we saw Tom Courtney in the cell; it now flashed upon the governor when he saw the prisoners pass him into the ante-room.

The room was then cleared, with the exception of the principal prisoner, the governor, and myself, and Ferriss was directed to remain. Mr. — having then cautioned the prisoner in the usual manner, commenced to examine him. He stated that his name was Michael Lynch, that he was from the county Galway, that he knew nothing whatever of any crime he was taken up for, or charged with; he was on his way to the fair of Enniskillen to buy pigs, when he was taken up by that gentleman there (pointing to Ferriss) for what he could not tell. This is all that could be got out of him, as he positively declined saying one word more, or answering any questions whatever. He was then removed, and the other prisoner brought in; and as they passed in the lobby, I heard Lynch say to the other, "*a dark night, friend,*" at the same time giving him a significant look. Another dumb witness, thought I. This man was in like manner cautioned and examined. He said his name was Martin Cooney, that he "did not mind the caution he got one straw, he would tell the whole, if he

was to be hanged for it the next moment ; and its longing I am since yesterday, when I heard him speaking to tell it." He was cautioned again, and it was fully explained to him that any thing he said would be written down and proved against him.

"So best, so best, gentlemen. I'll tell every thing. I have enough upon me, and I'll have no more—least of all, the blood of that poor innocent young man, Tom Courtney. Gentlemen, my companion's name is Peter Hopkins, I don't know what he told you ; he's from one village with me, in the county Mayo ; 'twas he, and I, and another boy—no matter who, but I'll tell if I am obliged—that broke into the widow Murphy's house, and robbed and murdered her. Tom Courtney never set a foot near it, no more than you did ; but Hopkins is so like him, that he was taken for him by every one that saw him that night ; even his own uncle, as Phil Moran turns out to be, swore to him. If you misdoubt me, gentlemen, you'll find an old purse in his small-clothes pocket this very moment, that belonged to the daughter ; she swore to it yesterday, and she'll know it."

"Be gad you won't get it in *his* pocket," said Ferris, "for I have it in mine ; but surely I got it in his pocket just now, when I searched him ; here it is, gentlemen, and money enough in it too ;" and he laid it on the table.

"The less I lie then, 'tis all the one thing," Cooney continued ; "O gentlemen ! I thank God I'm taken, for surely that young man is innocent, clean innocent. I had like to faint in the court-house, yesterday, when he was speaking about the real murderers—and Hopkins is the chief one, and I'm the other one. O Tom Courtney ! a hair of your head shall never fall by me, now that I'm taken ! and thank God, gentlemen, I am taken."

In this strain he went on, and the magistrate took down a full and detailed statement which he gave of the transaction at the widow Murphy's, but which you are too well acquainted with already. He further stated, "that when they heard a young man named Tom Courtney was charged with the murder, and taken up, they knew that it must have been from a strong likeness between him and Hopkins, as Hopkins had been called Tom, even Tom Courtney, on that night, by both the widow and her daughter, and also by Philip Moran, at the public-house. They

thought it a good chance, and were determined to let him suffer for it. He was quite sure he would have done so if he had not been taken up. There were two or three warrants out against him in the county of Mayo for different crimes, all bad enough, but no murder amongst them."

He then gave the name and residence of the third man, and repeated that he was willing and ready to abide by all he had stated ; that his mind and conscience were easy since he was prevented from being accessory to the murder of Tom Courtney.

The prisoners were then committed for reexamination, and the governor was directed to keep them strictly separate.

The next step was to send for Catherine Murphy and Winefred Cox, in order to see if they could identify Martin Cooney, and what they would say upon seeing Peter Hopkins. For this purpose the prisoners were placed in a yard with ten or twelve others, and they stood next each other but two. Catherine Murphy was brought to the door of the yard, and desired to look in through a small square hole, and say if she saw any person she knew, or had ever seen before ; but she had been kept in perfect ignorance of what had taken place. She looked for some time, ranging her eyes from one end to the other of the row. As they reached Cooney on each occasion, they stopped, and she gazed, for some seconds, at him ; they also paused, but not so long, as they fell upon Hopkins, and I thought she turned a little pale. At length, turning to the magistrate, she said :

"Yes, sir, I do ; I see another of the men who attacked my mother's house."

"Point out where he stands," said the magistrate.

"He is standing there, sir, next but two to the poor fellow who was condemned yesterday, but whose dress is greatly changed since then. That's him with the red hair ; he's the man that Winny Cox grappled with. I'd take my oath to him upon a hundred books."

The magistrate then assured her that Tom Courtney was not in the yard at all. She did not appear to believe him, and she scrutinized the man again very closely, and said :

"Is not that him next but two on the right of the man I have just pointed out, with the red hair ?"

The magistrate and the governor both solemnly assured her that was not Tom Courtney, and that he was not there. She appeared greatly confused, and burst into a profuse perspiration.

"Bring me into the room, for God's sake," said she, "and give me a drink of water. These are the two identical men, beyond a doubt. I see them together now as I saw them that night. O Tom Courtney! would I have mur——"

But ere she could finish the sentence, or had reached the room-door, she had fainted. Hopkins was then removed, (I can not say why, but the magistrate would have it so,) and Winefred Cox was brought to the door. She promptly and distinctly identified Cooney as the man with whom she had struggled on the night of the attack, and all she appeared to me to require to make her perfectly happy in this life was, then and there, to be *let at him*, with her bare hands.

"Let me at him; that's all ever I'll ask. Oh! let me at the villain, that's all I'll ask!" she repeated half a dozen times before she could be removed from the door.

Mr. — and I then requested the governor on no account whatever to permit any communication to be made to Courtney of what had transpired, for the present, as we intended to post off directly after the judge who had condemned him, to put him in possession of every thing that had occurred, and take his instructions.

Mr. —, who never forgot any thing which he ought to do, also arranged with the governor to wait upon the other judge at the earliest moment he could properly do so, and reveal to him the facts which had become known, and that we had gone after Sir William Smith to inform him. In the mean time the prisoners were to be kept separate, and all communication between them strictly prohibited.

I pass over our interview with the judge. I found that his lordship had, as I supposed, believed Tom innocent. His lordship sent me back to break the news to the poor fellow cautiously.

On our return I lost no time in speeding to the jail upon my mission of life and light to the dark and troubled heart of poor Tom Courtney. I met the governor in the yard, who told me that no person had since seen Courtney except himself, and that he had not the most remote idea

of what had happened. I told him, shortly, of our interview with Sir William Smith. He came with me himself, and, opening the cell-door, I entered, and he shut me in.

Tom Courtney was sitting on the side of his bed, but started up to meet me the moment I entered, and, stretching out both his hands to me, he said:

"O sir! I am glad you are come! I thought you would have been to see me to-day before this hour. My time is short. O sir! I have spent a miserably wretched night and day! death itself would be preferable to the night I spent. I wished to have told you this morning, but you hurried away, I knew not why. O sir! I have been nearly mad! at times I think I am mad. Can you wonder? Oh! how could it be otherwise? I wish it was all over. O sir! if I could subdue my heart to the will of God—if I could *feel* that I had submitted to his mysterious will—with what pleasure I could behold the light of that fatal morning now so near at hand; but I have had a fearful struggle, and, I hope—oh! yes, I do hope—that I have not lost the battle. At one time I feared I had been conquered, and that all was lost. O sir!" he continued, and a curious change came over him; "O sir! I have spent a miserable night. Oh! how I wish I had not slept at all—the waking to a new certainty of consciousness was frightful; and I had an extraordinary and tormenting dream. O sir! dreaming is a curious, a wonderful faculty of the brain. Have you ever been perplexed, during sleep, by one constant, unaccountable, irreconcilable idea—a confused, yet distinct idea—the certainty of an *impossible* fact—at one and the same moment knowing it to be *impossible*, yet believing it to be *true*—distinct, though confused—plain, but incomprehensible? 'Tis difficult clearly to explain what I mean; but, I dare say, you may have experienced some such thing, particularly if your mind has dwelt long upon any painful subject. Such I experienced last night to a very painful degree. I dreamed that I was in a foreign land—pardon me, sir, for all this, I must talk, for thought has nearly set me mad. I dreamed that I was in a foreign land, and that a horde of savages, naked and armed with knives, were pursuing me to take my life. There was one more ferocious than his fellows—a fiendish-looking man—and this man, I thought,

was James Murphy, although it was not from his appearance, with which I was well acquainted, that I recognized him, for he was tall and swarthy, naked and tattooed like the others; but I was quite sure it was James Murphy. Instead of a knife, however, he had a rope, which he swung round him, as he ran and cried—

“Keep back, keep back—let me have him—’twas my mother he murdered—he’s mine. Keep back, I say, with your knives. The rope, the rope—he’s mine—I’ll have him. Now, now—ah! I missed him. Come on, come on—the widow Murphy shall have blood for blood.”

“And they still pursued. Soon my strength became exhausted, and they every moment gained upon me. I felt that I must be overtaken and strangled—perhaps cut up and eaten by those savages. Soon the moment of my doom arrived. Murphy overtook and seized me—the rest came speedily up, and, clashing and brandishing their knives over and around me, seemed eager to begin their feast. At this moment a man rushed into the midst, and striking down Murphy’s arm, who had just raised it to force the rope about my neck, called out:

“Murphy, touch not that man—that’s Tom Courtney; I charge you touch him not—lay not your fingers on him—’twas I that did it.”

“As if by magic, the horde of savages disappeared, and, except my deliverer, the whole scene vanished. I turned to look upon him—to thank him—then rose the impossible fact—the confused, distinct, plain, perplexing idea. I knew that it was impossible, yet I saw that it was true. Gracious God, sir, I gazed upon myself—a second, separate self. ’Twas as if I stood out of myself, and looked upon myself standing near—as if I was myself and some other person at the same time. I heard myself say that ‘It was I who did it;’ and yet I thought that I was saved, and my innocence made clear. I could not understand it—I awoke in a profuse perspiration—my heart was on fire; and ever since I have been haunted with the frightful idea of hope—frightful I call it, for alas! it must be forever extinguished with to-morrow’s sun. Another matter, sir, has served to perplex me perhaps even more than that curious dream. I thought—ah! it must have been but thought—but about two hours ago, that little window above my head was open as

it is now; and I fancied—I’m sure it must have been but fancy—but I did think I heard some one in the yard say:

“If that be true, it saves Tom Courtney.”

“I’m almost sure I heard the words, or some of them; but, surely, if there were any grounds for hope, you at least, sir, would not have left me so long a prey to despair.”

He hid his face in his hands, and leaned upon the edge of the table which was near the bed where he sat.

I had let him run on all this time, thinking it best to do so; indeed, I knew not how I could have stopped or interrupted him, such was the rapidity with which he spoke, without being too sudden and abrupt in my communication. I now sat down beside him on the bed, and took his hand; ’twas red hot; and I said:

“Tom, my good friend, I could wish to see you calmer and more composed; more totally thrown upon the Lord for help and comfort.”

He interrupted me with:

“O sir! the bitterest pang within my heart is that I have not been able to seek help and comfort as I ought; that I have not been able to submit myself blindly, entirely to His will, without questioning it. But I sometimes—ah! too often I want to know his reasons for this sore affliction—unmerited, indeed, sir, unmerited, so far as regards the crime which has been put upon me. I know it is as a child I should submit; but I inquire his *reasons*; I ask what I have done; I argue with him, and at times I fear I openly rebel; yet with all this there has been a constant prayer that it might be otherwise with me; and my state of mind for the last hour—oh! how precious, how invaluable is an hour to me—has been reconciled, and, I trust, submissive. I had intended, sir, had the Lord permitted, to have endeavored to serve him in a foreign land, for which choice there were many reasons. Having seen a bright light, I felt fired with zeal to wander amongst distant and unknown regions to impart it to others; hence, perhaps, the connection of naked savages with my sleeping thoughts; but there was too much of *I will* in my plans, and the Lord has, indeed, shown me that ‘man proposeth, but that God disposeth.’ His will be done; with his help, nothing shall again disturb my soul. God is good; his will be done.”

"He is, indeed, good, Tom," said I, pressing his hand, which still almost set mine on fire. "He is very good, and can save those who trust in him; he can save to the uttermost."

"I do trust him with my whole heart and soul; I am content. Here I am, O Lord!—thine—thine; do with me as thou wilt." And he hid his face again in his hands. "O sir!" he added, almost immediately starting up, and turning his full gaze upon me; "the valley of the shadow of death is dark, very dark; and to enter it while the sun is shining over me, and birds singing round me, and the fragrance of the blooming flowers fresh upon the breath of spring, and in the prime of life and health, full of young and ardent hopes; all this might, perchance, be borne, had sickness, or even accident, brought down an unsullied name to an untimely grave; but oh! thus to be cut off by a cruel and disgraceful death, with the stain of murder falsely stamped upon my name and race; O sir! it is a dark, a dreadful, a mysterious dispensation."

"God is powerful as well as good," said I; "his arm is not shortened that he can not save; trust in him even still, Tom," and I pressed his hand fervently.

He turned a piercing glance upon me.

"Take care, sir, oh! take care what you say: I told you I was content; strike not the spark of hope again, or I shall die mad, and perhaps be lost."

"Recollect, Tom, that the knife was actually raised in Abraham's hand to slay his son, before the Lord saw fit to interfere to save him. He can save you even still, Tom, if it be his will to do so."

"If, if," he repeated, convulsively, while the burning tears ran down his wrists into his coat-sleeves. "If: ah! sir, you could not be so cruel as to speak thus, if there be no hope."

"Tom," I continued, as he still kept his face hid in his hands; "do you remember ever to have given a purse to Catherine Murphy—the one I suppose, which she swore to in her evidence?"

He raised his head, and looked at me. There was a wildness in his eye, and a twitching about the corners of his mouth that almost frightened me, and I even still feared the effects of the communication that was rising on my tongue.

"Yes," said he, more calmly than I expected; "some years ago. Why do you ask?"

"Would you know it again, Tom, if you saw it now?"

"Surely, any where in the world; 'twas a leather purse, lined with silk, and letters marked upon the lining. But why do you talk of such things now? I should think of other matters. I expect the Rev. Mr. A—— every moment. Talk not of them now, I beseech you."

"Is that it, Tom?" said I, throwing it upon the table before him.

"Yes," said he, snatching it up, "that is the very purse. Where, where did you get it? Catharine Murphy swore it was taken away by the murderers. O sir! tell me, where did you get it? When? when?—how?—speak quickly."

"In the pocket, Tom, of as great a villain as ever lived," said I; "in the pocket of the real murderer."

"There! I am saved," shouted Tom, springing to his feet, and seizing me by the collar of the coat with both his hands and shaking me furiously. "I am saved; oh! tell me I am saved. My God, I thank thee. O my mother!"

"You are, Tom, saved, beyond the possibility of doubt; not pardoned, for they have nothing to pardon, but fully, freely saved."

He stood for a moment like one bewildered, like a statue; the burning flush fled from his cheek, and became as it was wont to be in Tom Courtney's happier hours. The water-gates of his heart were broken up, and gushed forth in torrents of soft, cool tears. He threw himself on his knees by the bedside, and I left the room.

A few words, by way of conclusion, are necessary to this story. It has already extended far beyond what I had anticipated when I commenced to take it down in the form of a narrative from the heads given in my private journal; but I do not hesitate to say that it is a faithful detail of facts which took place under my own knowledge. All the conversation in court, as well as Tom Courtney's address upon conviction, are stated precisely as they occurred, and were taken down by myself at the time.

Tom Courtney saw Hopkins before he left the jail; he smiled a scornful smile as he looked at him; he admitted there was a strong likeness between them, but he could not be so good a judge upon that point as others; he reminded me, however, of his dream, recurring to the

subject several times at some length, and declared at last that he fully and freely forgave the persons who swore against him, adding: "that had it been in the daytime, he could scarcely have forgiven them."

Sir William Smith it was who tried Hopkins at C——r, and he told me afterwards that even between twins he had never seen so perfect a likeness. Courtney's mother also saw Hopkins, and—oh! the fondness of a mother's heart—she strenuously denied that there was the *smallest resemblance* between him and her "boy;" that nobody but a common fool could mistake them. This opinion she maintained to the last, and I doubt not that she really believed it.

The day fortnight that I told Tom Courtney he was saved, an order for his discharge having arrived, there was a merry and a happy party at the jail-gate. The whole parish came in to give poor Tom a joyous greeting and a cheerful escort to his home once more. Cars of all descriptions, low-back and high-back, gigs and tax-carts, arriving every moment; such brushing of straps, and stitching of harness; such rubbing of stirrups, and punching of holes; such smoothing of cushions, and greasing of wheels, was never seen as had been going on from daylight. Upwards of sixty men, mounted on their country horses, three abreast in front; then came from fifteen to twenty cars and other vehicles of one sort or other, filled with the beauty and fashion of the parish. Next the jail-gate stood an empty jaunting-car, the horse's head covered with boughs of evergreen, nodding in the breeze, with now and then a proud impatient toss of the head, and a pawing of the ground by the animal; for he was old Ned Courtney's jaunting-car horse—and a good one. Billy was now mounting in the driving seat, with whip and reins in hand, ready for the start, while about two hundred men, women, and children, on foot, filed along the jail-wall, to the right and left of the gate, ready to follow, two abreast, in the rear.

Presently a monster key was heard struggling in the lock, and with a loud short shoot of the bolt, the gate was thrown open, and forth issued Tom Courtney leaning on his father's arm, while upon his own leaned his mother, smiling and joyous, though rescued, I may say at the last moment, from a broken-hearted grave. I wish you could have heard the shout that rent the air as they appeared; I have heard loud simultaneous shouts from assembled thousands—ay, tens of thousands—but so hearty, so enthusiastic, so devoted a cheer I never heard, and never can again hear. Shall I say it? yes, nor do I blush to own it, that it brought tears of sympathy and joy—of exultation—swelling up in my eyes. If they ran over, it is no affair of yours, but many there were that wept outright.

Tom Courtney and his mother mounted on one side, while his father and Philip Moran mounted on the other. Three cheers more rent the air; the word "forward!" ran from mouth to mouth; Billy Courtney cracked his whip; old Larry Murrin, the piper, dressed in a spick-and-span new suit, struck up a lively quick step in advance of the whole procession, which moved forward with smiling, happy, chatting faces; and in less than two hours, Tom Courtney, a free and happy man, sat at breakfast with a numerous party of delighted friends in his old home.

Somewhat about two years subsequent to the termination of the above transaction, Tom Courtney joined the Welseyan Methodist Society, and soon after was ordained one of their ministers, and hastened to fulfill the aspiration of his heart—I think it was to the coast of Africa. I saw a letter from him to a religious friend; he was well, and freely alluded to the incidents which I have endeavored to detail. He thanked God for what had occurred, saying that "he considered it had been the greatest of the many mercies with which he had been favored." That is now upwards of thirty years ago, since which period I have altogether lost sight or intelligence of him.

WASHINGTON IRVING.

THE readers of the *ECLECTIC*, we trust, will be particularly gratified, as are we, with the well-engraved and beautiful portrait of the world-renowned man of letters which adorns our present number. We believe it is the latest and best of the portraits of one who has, during a well-spent life, imparted imperishable treasures to the literary wealth of his country from the affluence of his own mind. Our very skillful artist, Mr. Sartain, has done admirably in the composition and arrangement of the portrait, and finished it within the past few days. Quite recently we spent an hour or two with the original of this portrait, at his beautiful villa, Sunnyside, which looks out from the deep verdure of embowering trees upon the quiet waters of the noble Hudson, and greatly wish we could print the feelings of veneration with which we listened to the silvery tones of his voice, and admired the rich intellectual radiance of those fine eyes, which have traversed such wide fields of observation and thought, for the mental gratification of countless thousands, of the present and coming ages. But we must tread lightly in such presence, only expressing the hope that long years will intervene before the inhabitant of that vigorous and venerated framework of humanity shall vacate its tenement.

We hope to transgress no rule of courtesy by adding a brief and imperfect sketch, which we gather from the *English Cyclopædia of Biography*.

Washington Irving was born April 3, 1783, in the city of New-York, where his father, a native of Scotland, had settled as a merchant. He received a home education under the superintendence of his elder brothers, who were young men of considerable literary attainments. Fortunately perhaps for his genius, his health being too uncertain to permit of his entering upon commercial pursuits, he spent much of his youth in wandering about the picturesque haunts of Manhattan Island, where, among the old-fashioned inhabitants, he picked up many of the quaint traditions which he subsequently turned to so much advantage, and early familiar-

ity with which, no doubt, (as was the case with Scott,) imparted something of that peculiar coloring which has distinguished his imaginative works. His health continuing weak, he was, when about twenty, advised to proceed to the south of Europe. On this tour he spent about three years, visiting Sicily, Naples, and Rome, and then passing by way of France to England.

Before his European trip, he had in 1802 contributed some letters, signed "Jonathan Oldstyle," to a newspaper, *The New-York Morning Chronicle*, conducted by one of his brothers; and on his return to America he joined with Mr. Kirke Paulding, a man of congenial humor, in writing "Salmagundi," a series of papers which, by their novelty of style and freshness of matter, at once obtained great popularity. The work, commenced at the beginning of 1807, was, owing to a difference with the publisher, brought to a sudden termination at the close of that year. After "Salmagundi" was ended, Irving continued to write occasionally for the magazines and newspapers; and in 1809 appeared the inimitable *History of New-York*, by *Diedrich Knickerbocker*, a work which at once raised its author to the first place among his countrymen for original humor and literary skill. It is said that, like *Gulliver's Travels*, it at first found many readers, who regarded it as a veritable though somewhat extraordinary history; and some among the soberer citizens, as well as many of the descendants of the old Dutch settlers, were with difficulty brought to forgive the author for so irreverently handling a grave historical theme; but by the great body of the New-Yorkers the wit was heartily relished, and Irving at once became, as he has ever since continued to be, the most popular of native writers.

Literature, however, was not as yet thought of by Irving as a profession. After his return from Europe he had entered upon the study of the law, in the office of Judge Hoffman. But the desultory habits he had formed while strolling about Manhattan, or traveling through Europe;

the celebrity he had acquired by the *Salmagundi* papers and occasional magazine articles; the literary investigations he had entered upon for his Knickerbocker history; and not least, perhaps, the possession of ample pecuniary means, which enabled him to follow at pleasure more immediately interesting pursuits, and seemed to render unnecessary any future dependence on professional position, combined to divert his attention from Coke and Blackstone; and though he was admitted to the bar, he seems never to have had any serious intention of practicing. On the outbreak of the war with England, Irving volunteered his services; was appointed aide-de-camp to General Tompkins, the Governor of New-York; created a colonel and employed on "special service." He also during this period edited a magazine. Peace put an end at once to his military and his editorial duties, and Colonel Irving laid down his title, and once more merged in the firm of Irving Brothers.

In 1818 he began his famous *Sketch-Book*. As he wrote the successive papers in England, they were transmitted to New-York, and there published. Their reception in New-York was enthusiastic, and they soon came to be heard of in England. The *Literary Gazette* printed large portions of them "with many encomiums," and Irving heard that it was the intention of a London publisher to collect and reprint them all. He says that he "had been deterred by the severity with which American productions had been treated by the British press," from himself preparing an English edition; but this report removed his apprehensions, and he resolved to do so. In the preface to an edition of the *Sketch-Book* published in 1848, he has given an amusing account of the difficulty he found in inducing a publisher to undertake the risk on favorable terms. In his perplexity, he applied to Sir Walter Scott, from whom he had some years before experienced a hospitable welcome at Abbotsford. Scott spoke with warm admiration of the specimens Irving sent him, but even he seems to have found it no easy matter to persuade Constable to undertake the publication.

The success of the *Sketch-Book* was beyond that of any previous volume of disconnected essays. The book became a universal favorite. Its genial wit, quaint grace, gentle pathos, and quiet Addisonian

style, were generally appreciated. The story of Rip Van Winkle acquired unbounded popularity; the other legends were hardly less admired, and the sketches of English scenery and English manners were as much relished in England as in America. Irving became at once famous in both countries. The second volume of the *Sketch-Book* appeared in 1820. His next work, written chiefly in Paris, was *Bracebridge Hall*, published in 1822, a work which amply sustained his reputation. In 1824 appeared the *Tales of a Traveller*, chiefly the result of his travels on the continent, but also, it may be noticed, containing the last of his sketches descriptive of English life.

Mr. Irving was still in France when he was informed by Mr. Everett, the United States Minister at Madrid, of important discoveries having been made in Madrid by S. Navarette, respecting Columbus; and invited to proceed to that city with a view to examining, and, if he deemed it advisable, translating these documents. Irving accordingly went there, but he soon became convinced that the best application of these new materials, would be to use them as the ground-work of a life of the great admiral. He accordingly applied himself diligently to the task, and as the Spanish archives were liberally opened to him he was enabled to embody in his work a great deal of new matter. The *History of the Life and Voyages of Christopher Columbus* was published in 1828, and was succeeded in 1831 by a supplementary work on the *Voyages and Discoveries of the Companions of Columbus*.

Mr. Irving's residence in Spain and his researches connected with its early history had excited in him considerable interest in the Moorish conquerors of Granada; and the result of further studies, was a kind of historical romance, entitled *A Chronicle of the Conquest of Granada, by Fray Antonio Agapida*, 2 vols., 1829. His Moorish studies, a residence of some months in the ancient palace of that remarkable people, and rambles about the old cities of Spain, led him to write in his old manner a series of sketches which he published in 1832, under the title of *The Alhambra*.

In the summer of 1829, Mr. Irving received the appointment of Secretary of Legation at London. Whilst in England, he mingled freely in the best society, and

was the lion of at least one season. He received, in 1830, one of the two gold medals of the Royal Society of Literature, the other being given to Mr. Hallam, and the University of Oxford bestowed on him the degree of LL.D. It was not till 1832, "after an absence of seventeen years," that he "saw again the blue line of his native land." His reception in New-York, as indeed in every part of America which he subsequently visited, was of the most enthusiastic kind. But he did not stay long in his native city; an opportunity offering, he, the same autumn, accompanied Mr. Ellsworth, the Indian commissioner, and Mr. Latrobe, the author of *Rambles in North-America*, in a journey to the far west, and, as of yore, "writing of what was suggested by objects before him," his journey produced a *Tour on the Prairies*. This work was not, however, published till 1835. He had, meanwhile, purchased an estate by the spot he had described as Sleepy Hollow, and the fitting up after his own fancy the old mansion of the Van Tassels, which he had named Woolfert's Roost, had occupied no small amount of time. The *Tour* was followed in the same year by his recollections of *Abbotsford and Newstead Abbey*, and by his *Legends of the Conquest of Spain*. To these, in 1836, succeeded *Astoria, or Enterprise beyond the Rocky Mountains*; and in the next year the *Adventures of Captain Bonneville; or, Scenes beyond the Rocky Mountains of the Far West*. In 1841, he received the appointment of Minister Plenipotentiary to the Court of Spain. The appointment was a popular one in Madrid, where his previous residence, and his *Life of Columbus*, had gained him numerous friends. He remained there above four years, having only been recalled, at his own request, on Mr. Polk's election to the presidency, in 1846.

On his return to America, Mr. Irving retired to his beautiful residence on the Hudson, and renewed his literary avocations; his first employment being the publication of a carefully revised edition of his complete works. But he had for some years been pondering a work on the rise and progress of Mohammedanism, and it eventually took the form of a biography of the prophet, with sketches of his immediate successors: it appeared in 1849-50, under the title of *Mohammed and his Successors*. He also about this time published a pleasantly written biography of Oliver Goldsmith. He did not again appear before the world, as an author, till 1855, when he published a volume of sketches, some of which had appeared in the New-York magazines, entitled *Chronicles of Woolfert's Roost and other Papers*, which were marked by all the old polish and elegance, and very much of the humor and vigor which had rendered the *Sketch-Book* so general a favorite. But his countrymen were watching for a more important work. It was well known that he had been engaged even before his mission to Spain, in collecting materials for a new biography of the great founder of American independence, and that it was the task he had selected as his crowning literary labor. It was accordingly looked forward to with much eagerness, and the first volume of the *Life of Washington* (1855) met with a warm welcome. A second, third, and fourth have since appeared, and are to be followed by others. Like Mr. Irving's other historical works, it is marked by an excellent style of narrative, while it displays a just appreciation of the moral and mental character and conduct of the hero, and a warm sympathy with his grand enterprise: and above all, it has the great merit of being a thoroughly readable book.



ENG'D BY JOHN SUTTON, AFTER A PHOTOGRAPH FROM LIFE.

WILLIAM H. PRESCOTT.

Wm. H. Prescott

REPRODUCED BY THE DODGE REYNOLDS

